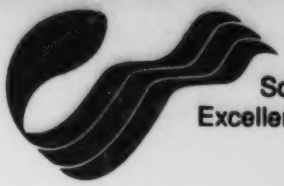

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# Currents, Temperature and Salinity Data from Northern Baffin Bay, October 1985 - August 1986

C.K. Ross

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1991

**Canadian Data Report of Hydrography and Ocean Sciences No. 95**

Fisheries and Oceans Pêches et Océans

Canada

## Canadian Data Report Of Hydrography and Ocean Sciences

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Les rapports statistiques servent de véhicule pour la compilation et la diffusion des données sous une forme directement utilisable par les scientifiques et les techniciens. En général, les rapports contiennent des données brutes ou analysées, mais ne fournissent pas d'interprétation des données. Ces compilations sont préparées le plus souvent à l'appui de travaux liés aux programmes et intérêts du service des Sciences et levés océaniques (SLO) du ministère des Pêches et des Océans.

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Les rapports statistiques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés sont fournis contre rétribution par des agents commerciaux.

Les établissements des Sciences et levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports en décembre 1981. Une liste complète de ces publications figure dans le volume 39, Index des publications 1982, du *Journal canadien des sciences halieutiques et aquatiques*. La série actuelle a commencé avec la publication du rapport numéro 1 en janvier 1982.

91-05058/

Canadian Data Report of
Hydrography and Ocean Sciences No. 95

1991

# CURRENTS, TEMPERATURE AND SALINITY DATA FROM NORTHERN BAFFIN BAY, October 1985 - August 1986

by

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## ABSTRACT

Ross, C.K. 1991. Currents, temperature and salinity data from northern Baffin Bay, October 1985 - August 1986. Can. Data Rep. Hydrogr. Ocean Sci. No. 95: vii + 161 pp.

This report presents a statistical and graphical description of the moored current meter data collected during the period October 1985 to August 1986 in northern Baffin Bay.

The presentation for current meter data takes the form of means over the length of the record and monthly means, ranges and standard deviations; time series plots of the hourly data and low pass filtered data; progressive vector plots; tidal constituents and spectra of velocity components.

## RÉSUMÉ

Ross, C.K. 1991. Currents, temperature and salinity data from northern Baffin Bay, October 1985 - August 1986. Can. Data Rep. Hydrogr. Ocean Sci. No. 95: vii + 161 pp.

Le présent rapport expose, au moyen de statistiques et de graphiques, les données de courantomètre entre octobre 1985 et août 1986 dans la partie nord de la baie Baffin.

Les données provenant des courantomètres sont présentées sous forme de moyennes sur la période considerée et de moyennnes, amplitudes et écarts-types mensuels; de tracés de séries chronologiques des données horaires et des données de filtrage passe-bas; de tracés vectoriels progressifs, ainsi que de composantes de la marée et de spectre des composantes de la vitesse.

# CURRENTS, TEMPERATURE AND SALINITY DATA FROM NORTHERN BAFFIN BAY, October 1985 - August 1986

## INTRODUCTION

A program of year-long moored observations in Baffin Bay was started in the summer of 1983. The first year's moorings (Ross, 1990a) were deployed in northwestern Baffin Bay and the second year in southwestern Baffin Bay (Ross, 1990b). On recovery of these moorings in the fall of 1985 a new set of four current meter moorings were deployed in northern Baffin Bay.

Four current meter moorings (consecutive numbers 700, 701, 702 and 703) were deployed in October 1985 during cruise 85-029 of CSS Baffin. The moorings were recovered in August 1986 during cruise 86-021 of CSS Hudson. The locations of the moorings are given in figure 1. A listing of mooring particulars is given in Table I and Table II.

## INSTRUMENTATION

The four moorings included 11 Aanderaa RCM5's. Each instrument was equipped with current speed sensors, current direction, temperature, pressure and conductivity sensors. Data were recorded at hourly intervals.

The manufacturer quotes accuracies for this instrument as: time within ±2 s/d; temperature ±0.15°C with a response time of 12 s; conductivity ±0.07 mmho/cm; current speed ±.01 m/s with a threshold of .015 m/s; and current direction ±5° for speeds above .05 m/s and tilt less than 12°

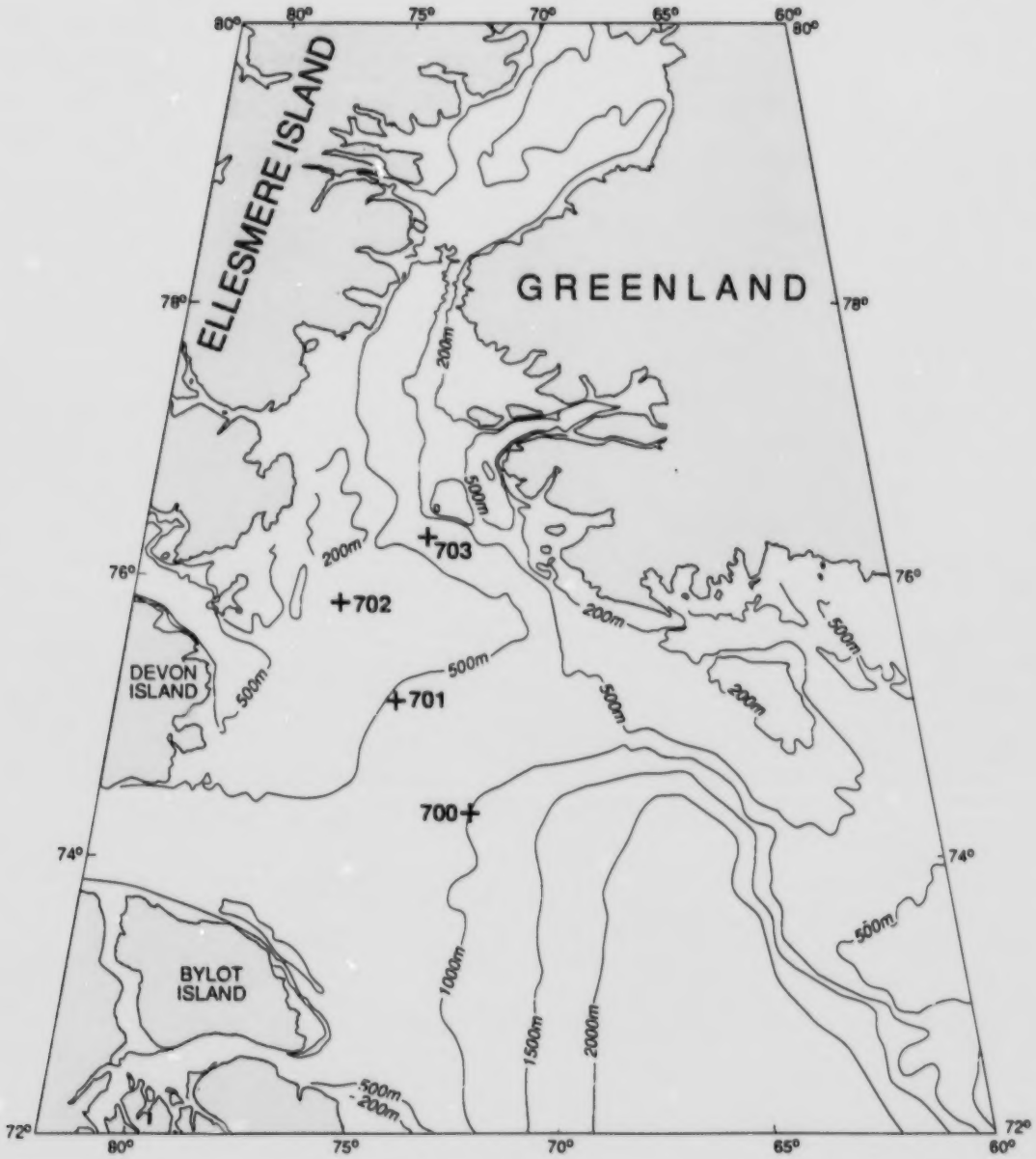



**FIGURE I:** Location of moorings

## TABLE I

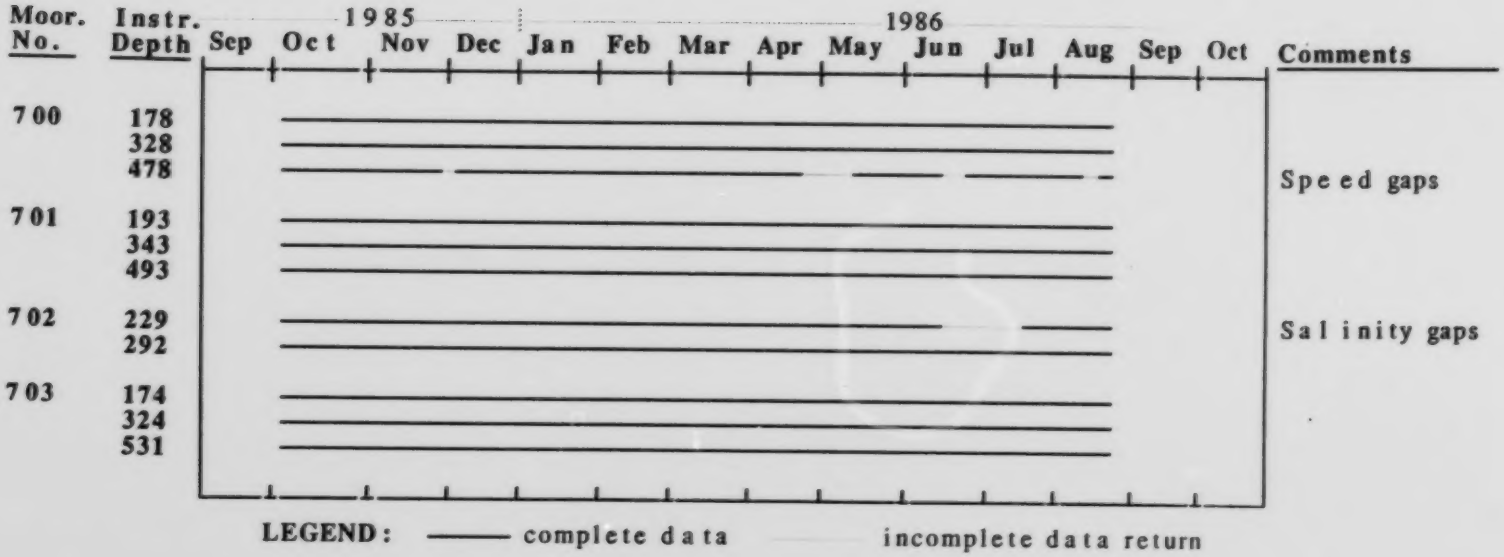
## SUMMARY OF MOORINGS

| Mooring Number | Latitude (N) | Longitude (W) | Water Depth (m) | Instrument Depth (m) | Type | Sensors | Data Return (dd/mm/yy) Start | End |
|---|---|---|---|---|---|---|---|---|
| 700 | 74 34.1 | 72 13.5 | 1013 | 178 | Aa | VTSP | 04/10/85 | 20/08/86 |
| | | | | 328 | Aa | VTSP | 04/10/85 | 20/08/86 |
| | | | | 478 | Aa | VTSP | 04/10/85 | 20/08/86 |
| 701 | 75 20.4 | 74 21.8 | 533 | 193 | Aa | VTSP | 04/10/85 | 20/08/86 |
| | | | | 343 | Aa | VTSP | 04/10/85 | 20/08/86 |
| | | | | 493 | Aa | VTSP | 04/10/85 | 20/08/86 |
| 702 | 76 00.7 | 76 04.7 | 314 | 229 | Aa | VTSP | 30/10/85 | 21/08/86 |
| | | | | 292 | Aa | VTSP | 03/10/85 | 21/08/86 |
| 703 | 76 29.2 | 73 37.2 | 546 | 174 | Aa | VTSP | 03/10/85 | 22/08/86 |
| | | | | 324 | Aa | VTSP | 03/10/85 | 22/08/86 |
| | | | | 531 | Aa | VTSP | 03/10/85 | 22/08/86 |

Notes:

| | |
|---|---|
| Aa | Aanderaa RCM5 current meter |
| V | velocity measurement |
| T | temperature measurement |
| P | pressure measurement |
| S | salinity measurement |

TABLE II: Instrument performance and data return



from horizontal. The compass of each instrument was calibrated after recovery. CTP stations were occupied in the vicinity on deployment and recovery to verify the calibration of the temperature and conductivity sensors. The temperature sensors were always found to agree within the expected accuracy. The conductivity sensors did show variations and the resulting salinity records were adjusted with a linear trend between the beginning and final comparisons.

## DATA PROCESSING

The data recorded by the Aanderaa instruments were translated to computer readable files. The direction data are corrected by applying the calibration data from the compass swing and also corrected for the local magnetic variation as given on navigational charts for the area. The current speed is computed by applying a linear relationship to the encoder value according to the data supplied by the manufacturer. The current velocity is determined by taking the direction as the arithmetic mean of the direction data at the beginning and end of the speed integration period. The average speed/direction is then time-stamped at the mid-point of the cycle. Temperature is computed by applying a cubic polynomial fitted to the results of a temperature bath calibration. Pressure and conductivity use a linear relationship.

The recovered data required little editing. A few obviously erroneous data values were manually removed from the records.

## DATA PRESENTATION

Each time series from the moored current meters is presented either in its raw hourly form or as a low pass filtered time series. The filter used was a Cartwright filter with 129 weights that passes more than 95% of the input power for periods longer than 40 h, 50% at 31 h and less than 1% for periods shorter than 24 h. The resulting low pass time

series are subsampled every 6 h.

A table of statistics and information on the location and times of deployment is given for each record. Statistics for each complete record include the number of observations for each sensor and the minimum, maximum, mean and standard deviation for each of pressure, salinity, temperature and speed as well as the current velocity in components to the northeast and southeast. These coordinates were chosen for conformity with the previous data reports and many of the present data records show a mean current aligned with this coordinate system. A listing of the mean and standard deviation of temperature, salinity, speed and the northeast/southeast components of current velocity are given for each calendar month.

Time series plots of hourly values of direction, speed, north and east components of current velocity and temperature are presented for each record. Each record requires several pages as only 60 d of data are presented on each page. The hourly current data are used to form a progressive vector diagram with symbols every 10 d and labels every 60 d.

The low pass data are presented as a single page of the complete record of speed, northeast and southeast components of velocity, temperature, salinity and a stick diagram of velocities. For extra resolution the time axis is expanded to re-draw the stick diagrams with 60 d of data in each panel.

A table of the major tidal constituents ($K_1$, $O_1$, $P_1$ $M_2$, $S_2$, $N_2$, $K_2$, $M_f$, $M_4$, $MS_4$) is given for each current record. These constituents are determined from the maximum possible length of record.

Spectra are presented for the northeast and southeast components of velocity in two forms: log-log presentation of spectral power versus frequency and log-linear presentation of frequency times spectral power versus frequency (i.e. energy preserving display). The spectra are

computed by using a fast Fourier transform on blocks of data (1024 h) that have had their mean and trend removed, averaging over variable (approximation to logarithmic) frequency space and averaging the estimates from each block. The standard error associated with the block to block variability of each spectral estimate is used to give the error estimate shown on each spectral estimate.

Throughout, an attempt has been made to minimize the number of scales used for each presentation so that comparison from record to record may be made.

## ACKNOWLEDGEMENTS

I would like to express my gratitude to the many individuals who helped to gather, process and present these data. In particular the personnel of the CSS Baffin, CSS Hudson, the technical support of the Ocean Circulation Division and Coastal Oceanography Division of the Physical and Chemical Sciences Branch at the Bedford Institute of Oceanography.

## REFERENCES

Ross, C.K. 1990a. Currents and temperature data from northwestern Baffin Bay, September 1983 - September 1984. Can. Data Rep. Hydrogr. Ocean Sci. No. 78: viii + 227 pp.

Ross, C.K. 1990b. Currents and temperature data from southwestern Baffin Bay, October 1984 - October 1985. Can. Data Rep. Hydrogr. Ocean Sci. No. 79: viii + 180 pp.

**Mooring 700**
**Depth 178 m**

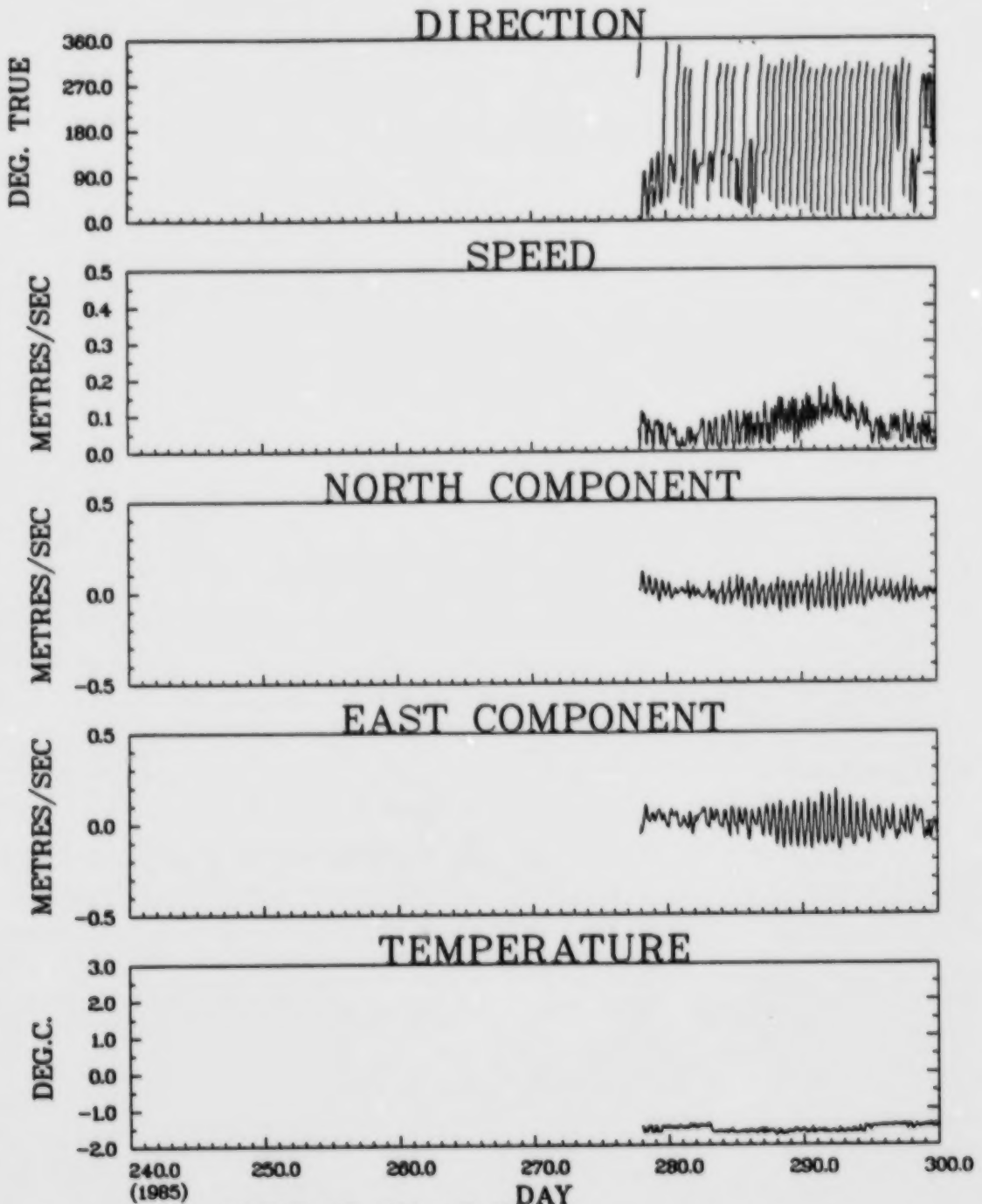
| | | | |
|---|---|---|---|
| Latitude | 74° 34.1N | Deployment | 2156Z 4 Oct., 1985 |
| Longitude | 72° 13.5W | Recovery | 0857Z 20 Aug., 1986 |
| Water Depth | 1013 m | Duration | 318 d |

## RECORD LENGTH STATISTICS

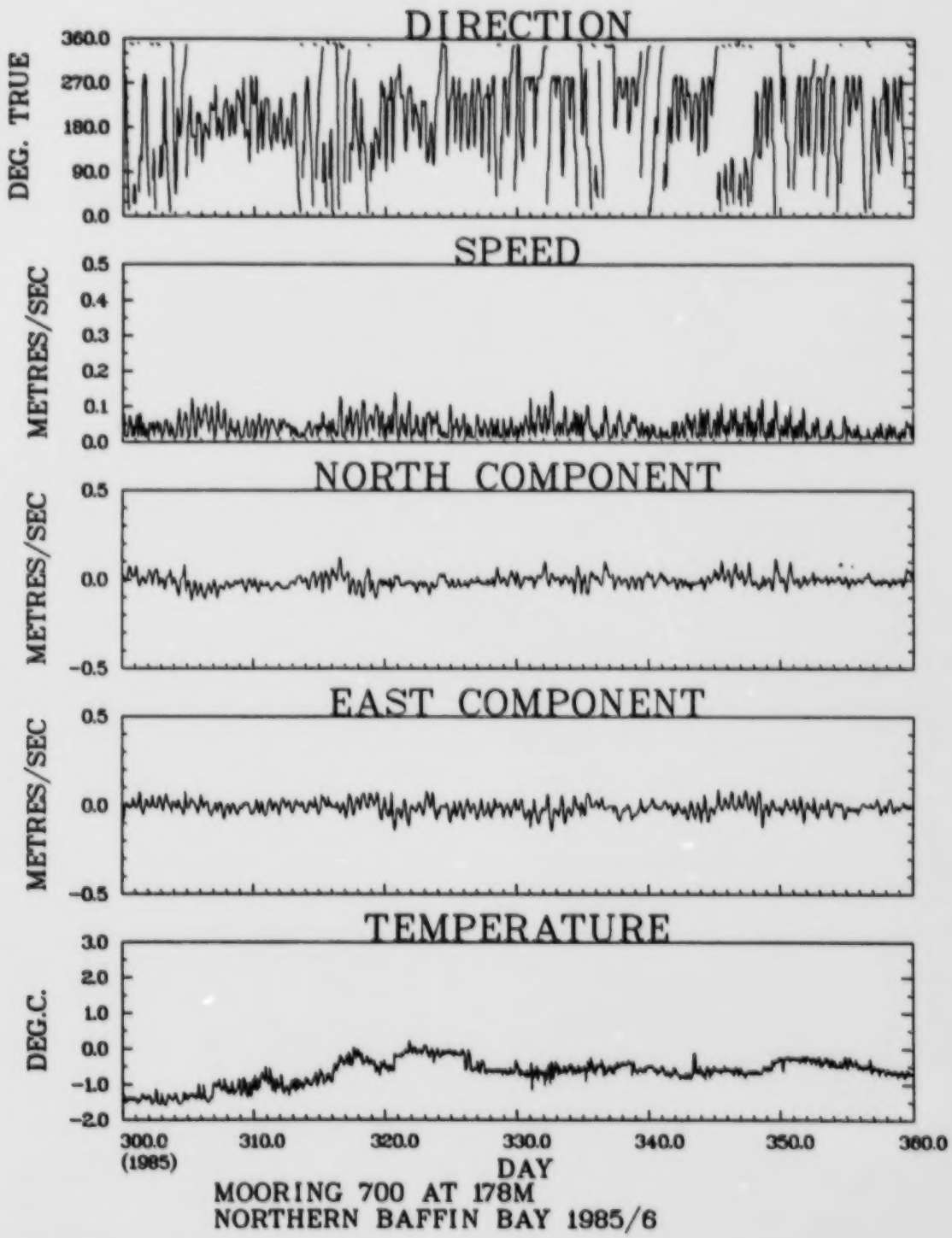
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7666 | 174 | 188 | 182 | 1.1 |
| Temperature (T) | °C | 7665 | -1.73 | 0.43 | -0.34 | 0.45 |
| Salinity (S) | PSS78 | 7665 | 33.71 | 34.10 | 33.92 | 0.06 |
| Speed (R) | $m.s^{-1}$ | 7666 | 0.015 | 0.187 | 0.053 | 0.031 |
| Northeast Component (V) | $m.s^{-1}$ | 7666 | -.122 | 0.137 | 0.000 | 0.037 |
| Southeast Component (U) | $m.s^{-1}$ | 7666 | -.151 | 0.168 | -.008 | 0.048 |

## MONTHLY MEANS

| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 649 | -1.53±0.10 | 33.78±0.02 | 0.065±.037 | 0.000±.042 | 0.004±.061 |
| November | 720 | -0.64±0.39 | 33.88±0.05 | 0.047±.027 | -.020±.031 | 0.002±.040 |
| December | 744 | -0.54±0.16 | 33.89±0.03 | 0.040±.024 | -.001±.029 | -.010±.035 |
| January | 744 | -0.28±0.10 | 33.92±0.03 | 0.043±.028 | -.006±.027 | -.002±.044 |
| February | 672 | -0.13±0.12 | 33.95±0.03 | 0.053±.030 | -.009±.031 | -.008±.052 |
| March | 744 | -0.13±0.08 | 33.95±0.02 | 0.058±.035 | -.006±.038 | -.019±.052 |
| April | 720 | -0.15±0.08 | 33.94±0.03 | 0.055±.029 | -.002±.037 | -.003±.050 |
| May | 744 | -0.19±0.13 | 33.94±0.04 | 0.051±.029 | -.021±.032 | -.009±.044 |
| June | 720 | -0.13±0.11 | 33.95±0.03 | 0.054±.030 | 0.023±.031 | -.019±.044 |
| July | 744 | -0.13±0.16 | 33.96±0.04 | 0.064±.031 | 0.027±.036 | -.008±.054 |
| August | 465 | 0.19±0.08 | 34.01±0.03 | 0.054±.027 | 0.030±.028 | -.012±.043 |




MOORING 700 AT 178M
NORTHERN BAFFIN BAY 1985/6

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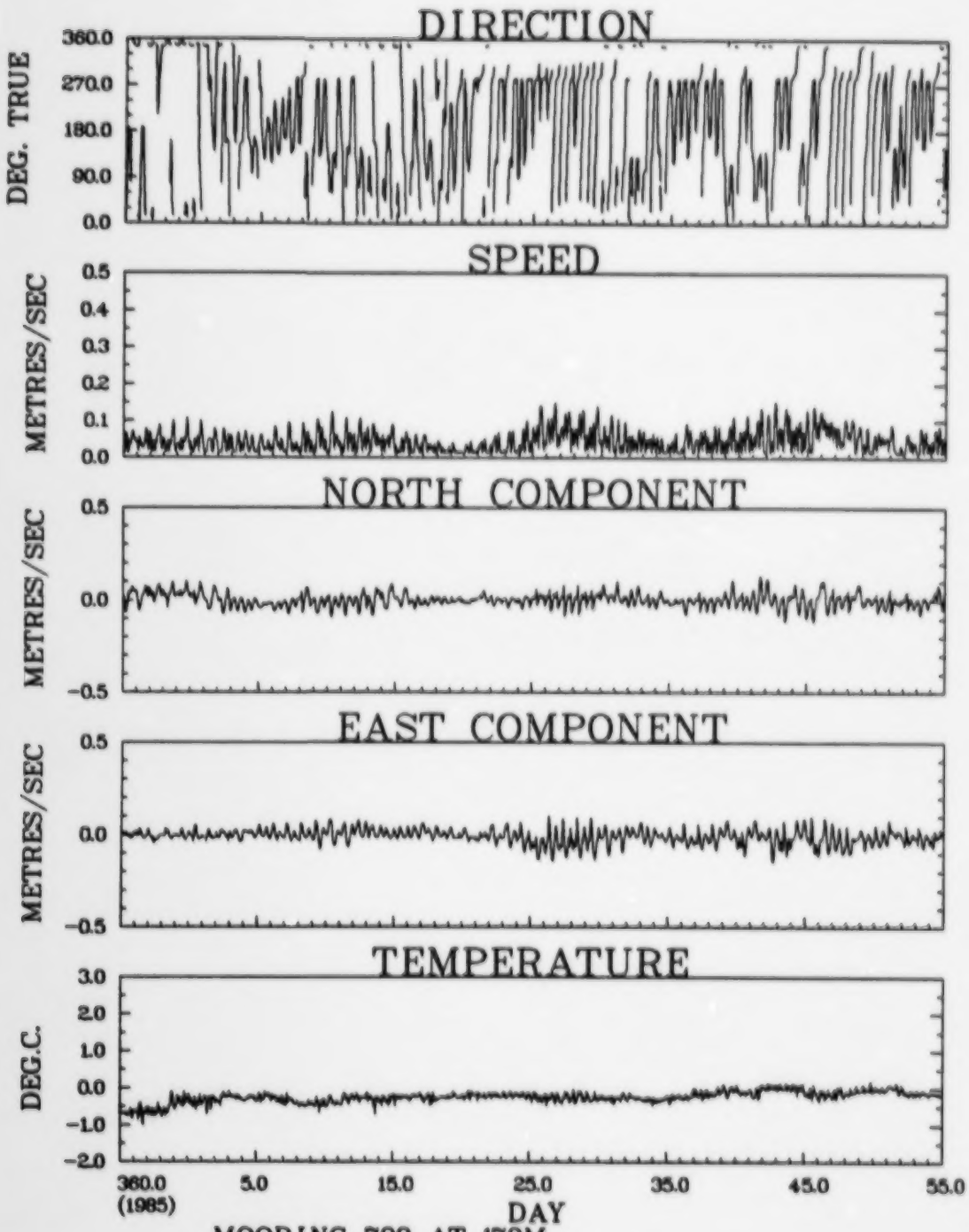


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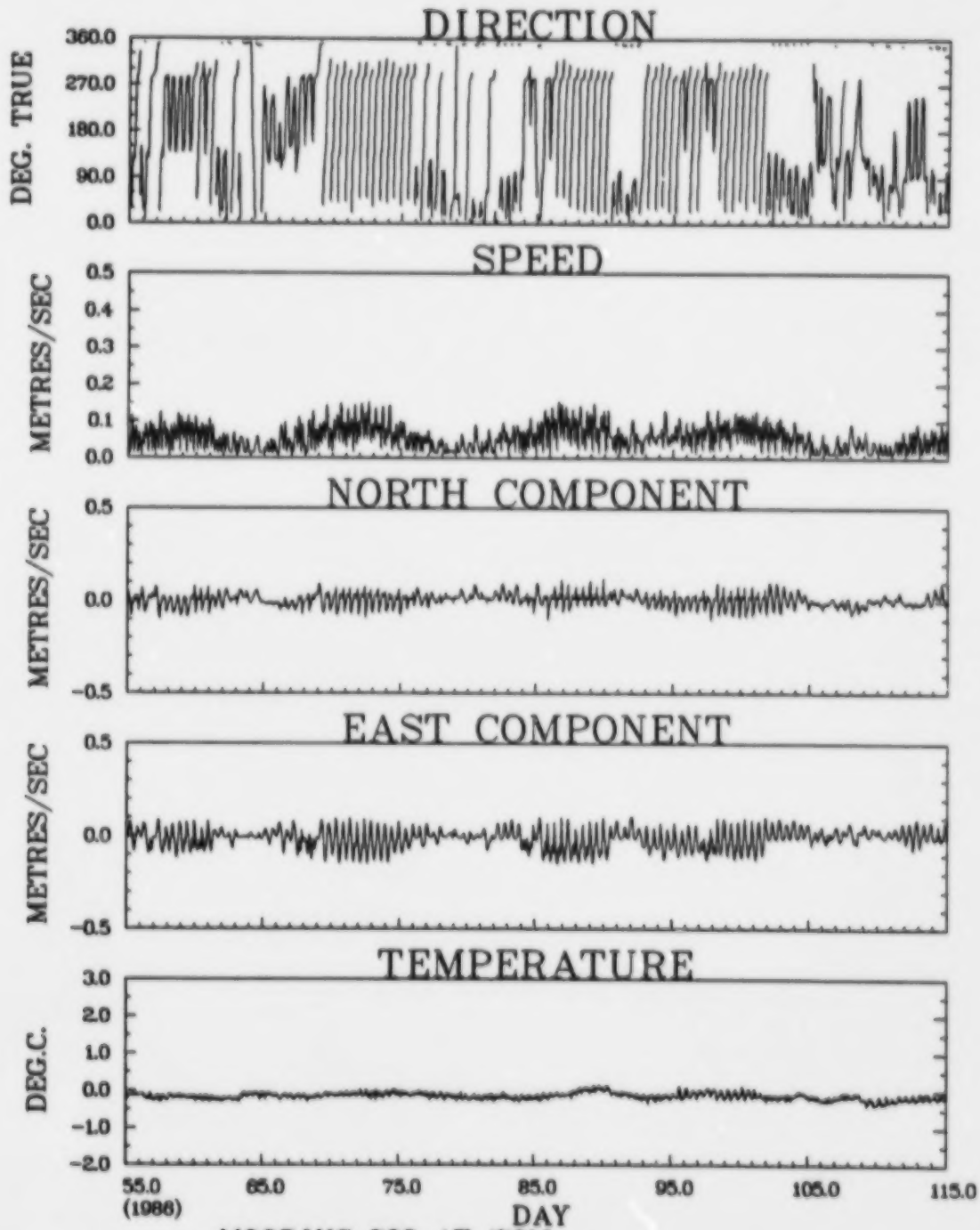


MOORING 700 AT 178M
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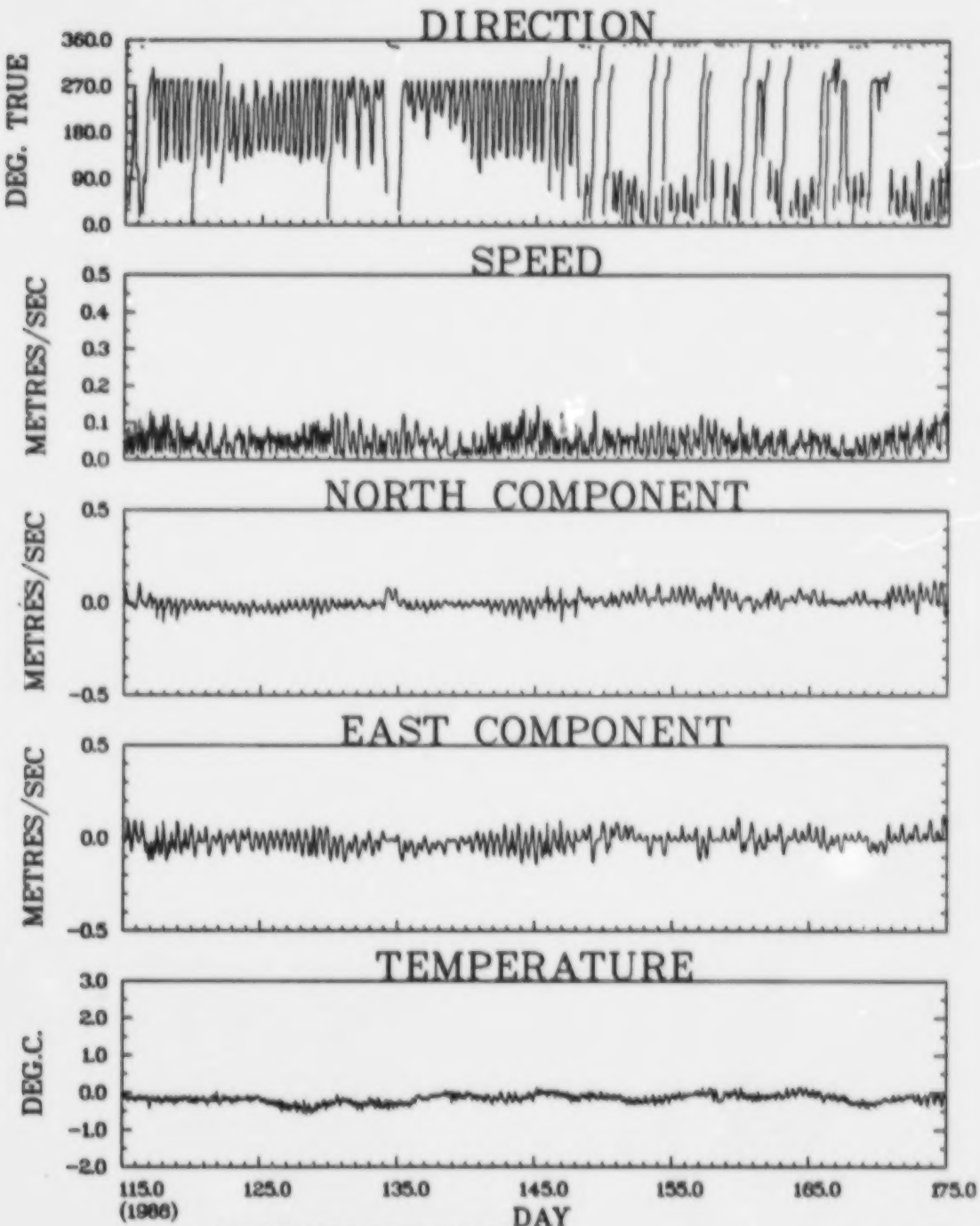


MOORING 700 AT 178M
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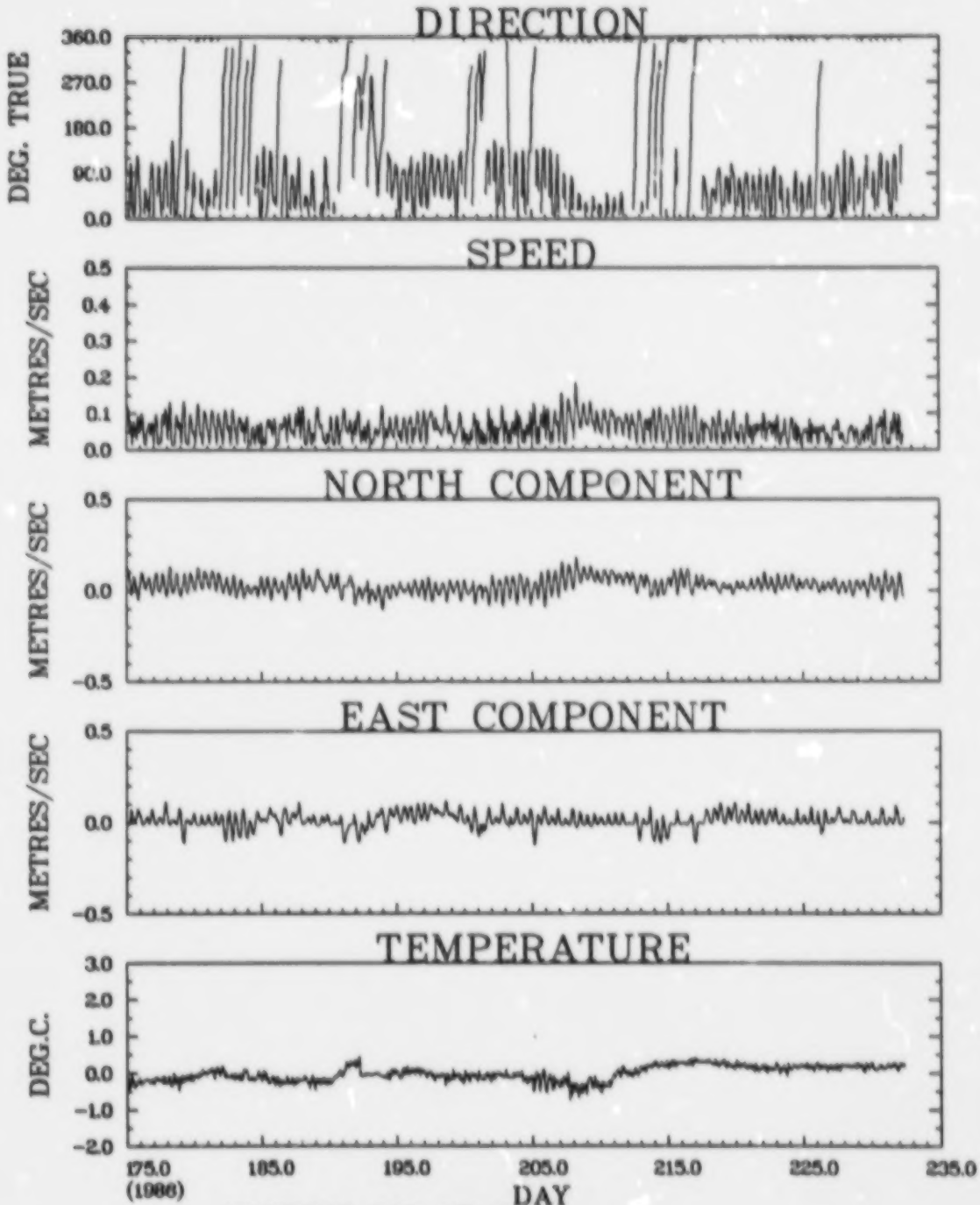


MOORING 700 AT 178M
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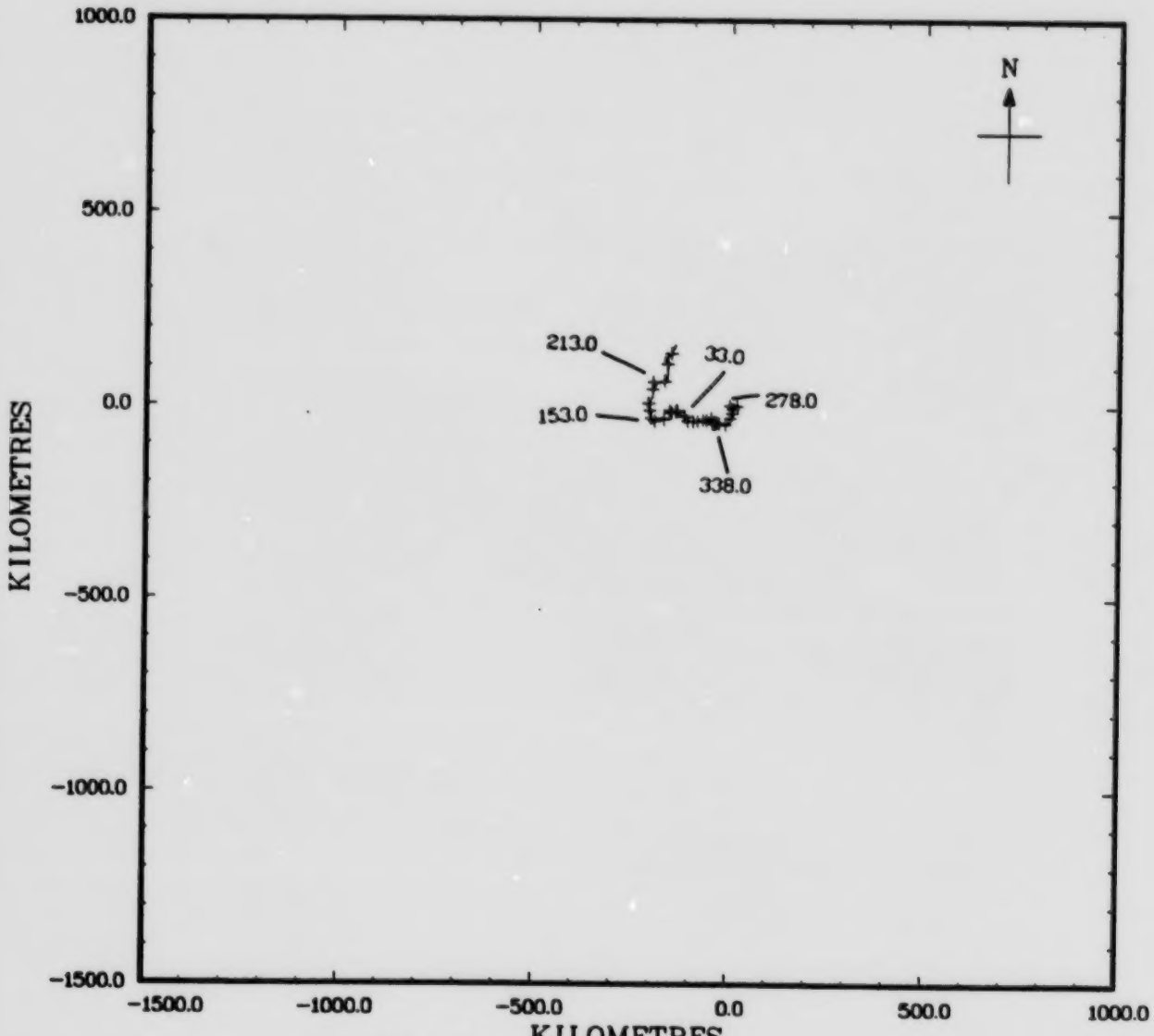
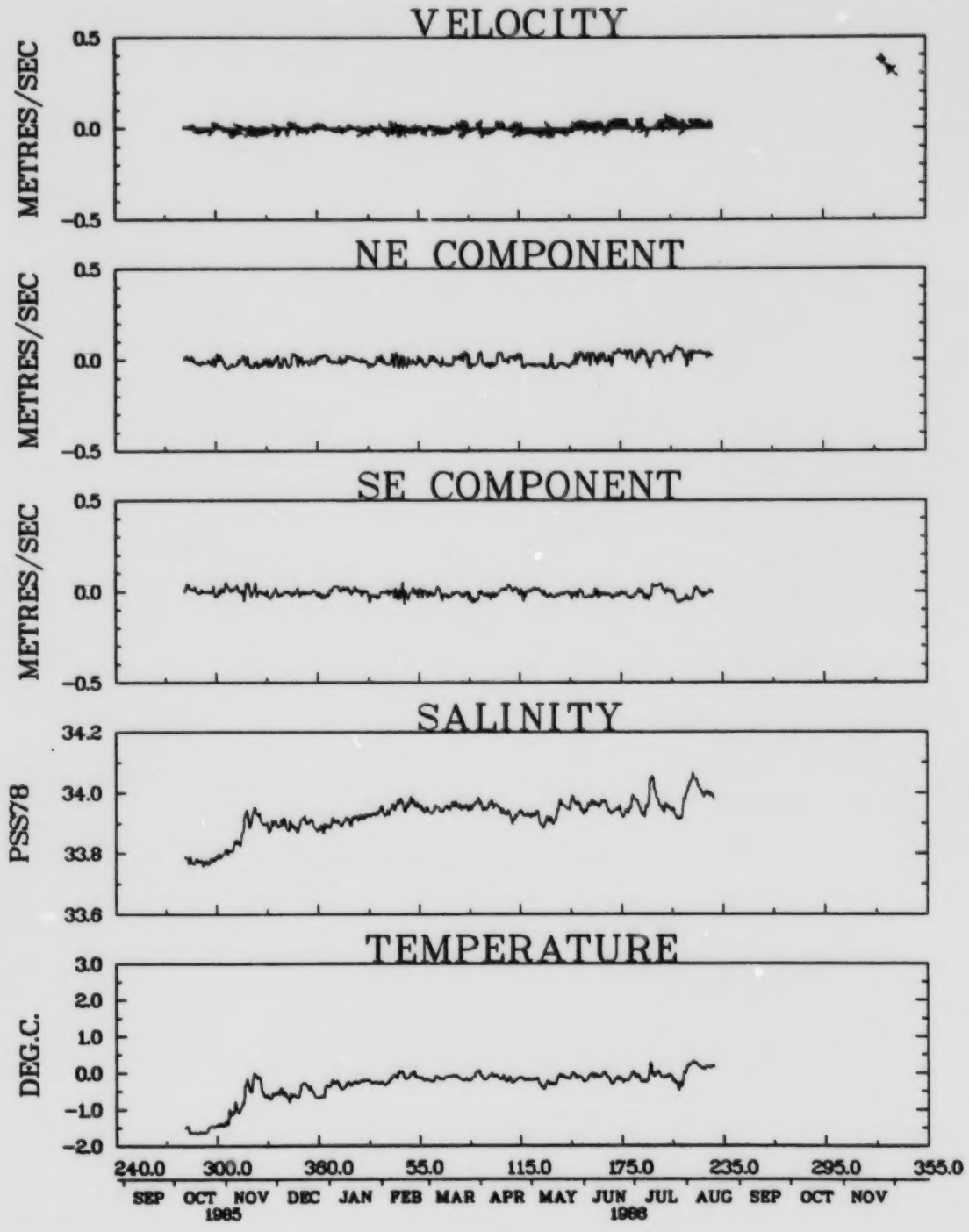
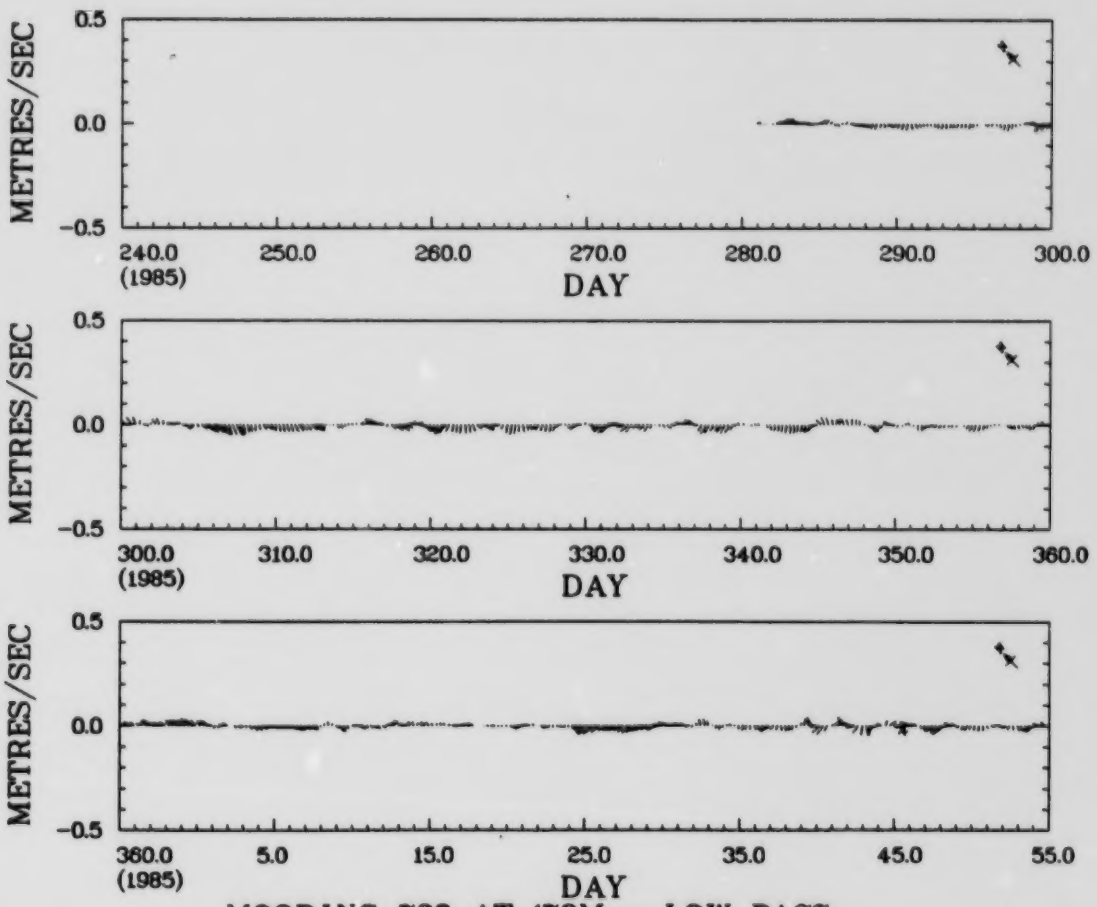


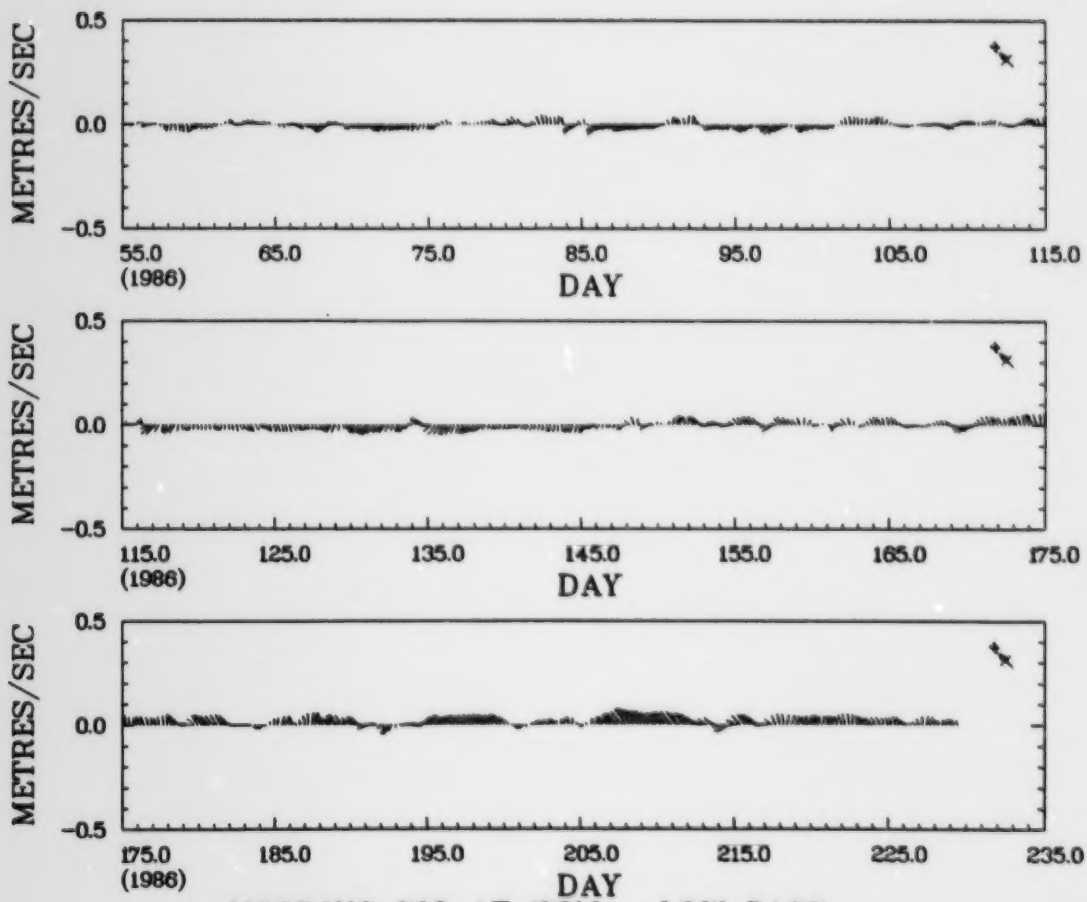

MOORING 700 AT 178M
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 178M – LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 178M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



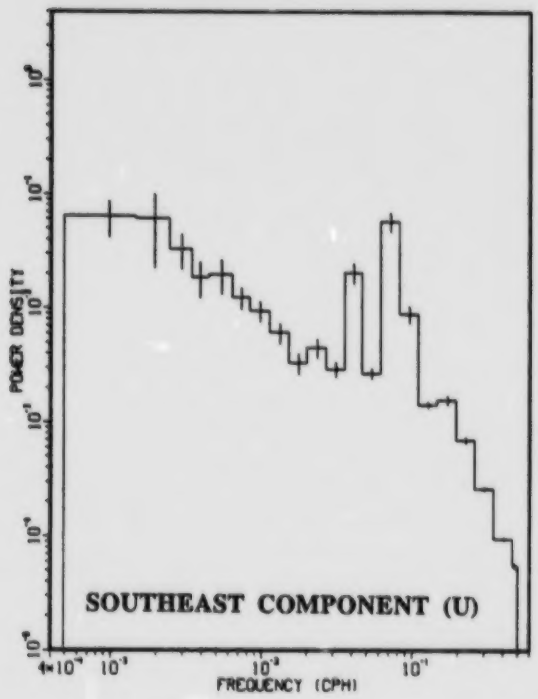

MOORING 700 AT 178M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

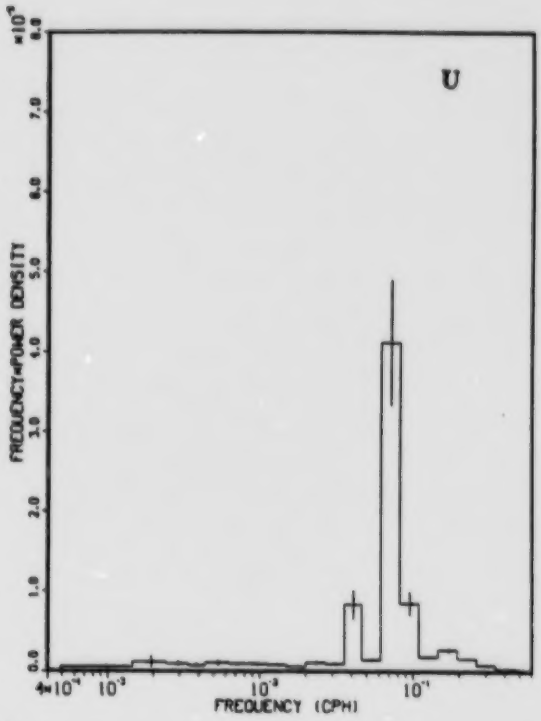
**Mooring 700**
**Depth 178 m**

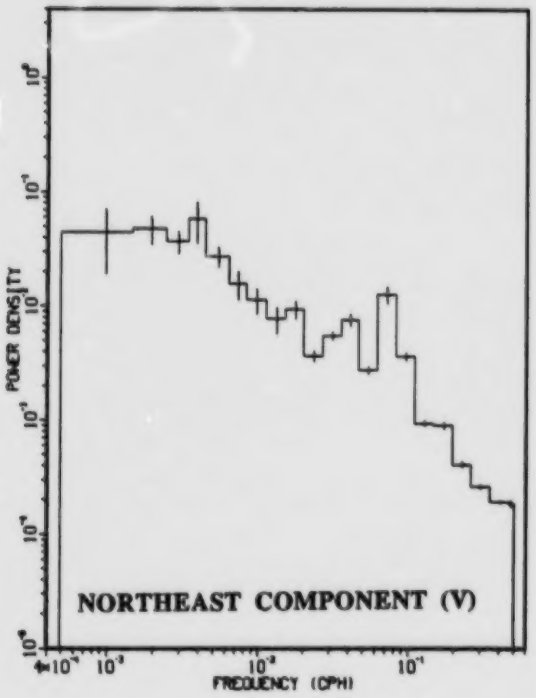
**Tidal Analysis**

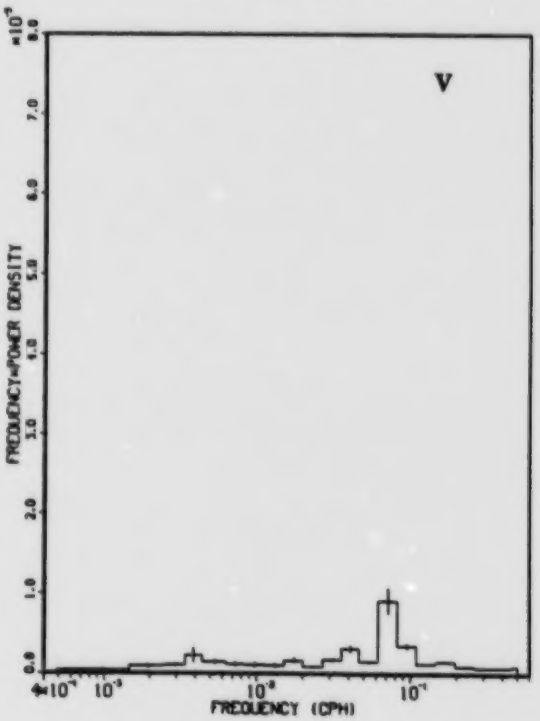
319.4 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .015 | .000 | 113 | 97 | C | .006 | 280 | .014 | 97 |
| O1 | .008 | .002 | 130 | 40 | C | .006 | 239 | .006 | 26 |
| P1 | .006 | .000 | 322 | 274 | C | .005 | 278 | .004 | 89 |
| M2 | .044 | .003 | 124 | 228 | C | .025 | 54 | .037 | 226 |
| S2 | .015 | .001 | 129 | 271 | A | .010 | 88 | .012 | 273 |
| N2 | .010 | .001 | 132 | 195 | C | .007 | 22 | .008 | 189 |
| K2 | .006 | .001 | 114 | 277 | C | .003 | 119 | .005 | 273 |
| MF | .002 | .000 | 114 | 232 | C | .001 | 82 | .002 | 225 |
| M4 | .002 | .000 | 325 | 333 | A | .002 | 332 | .001 | 154 |
| MS4 | .002 | .000 | 108 | 228 | A | .001 | 41 | .002 | 229 |




MOORING 700 AT 178M – LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 700**
**Depth 328 m**

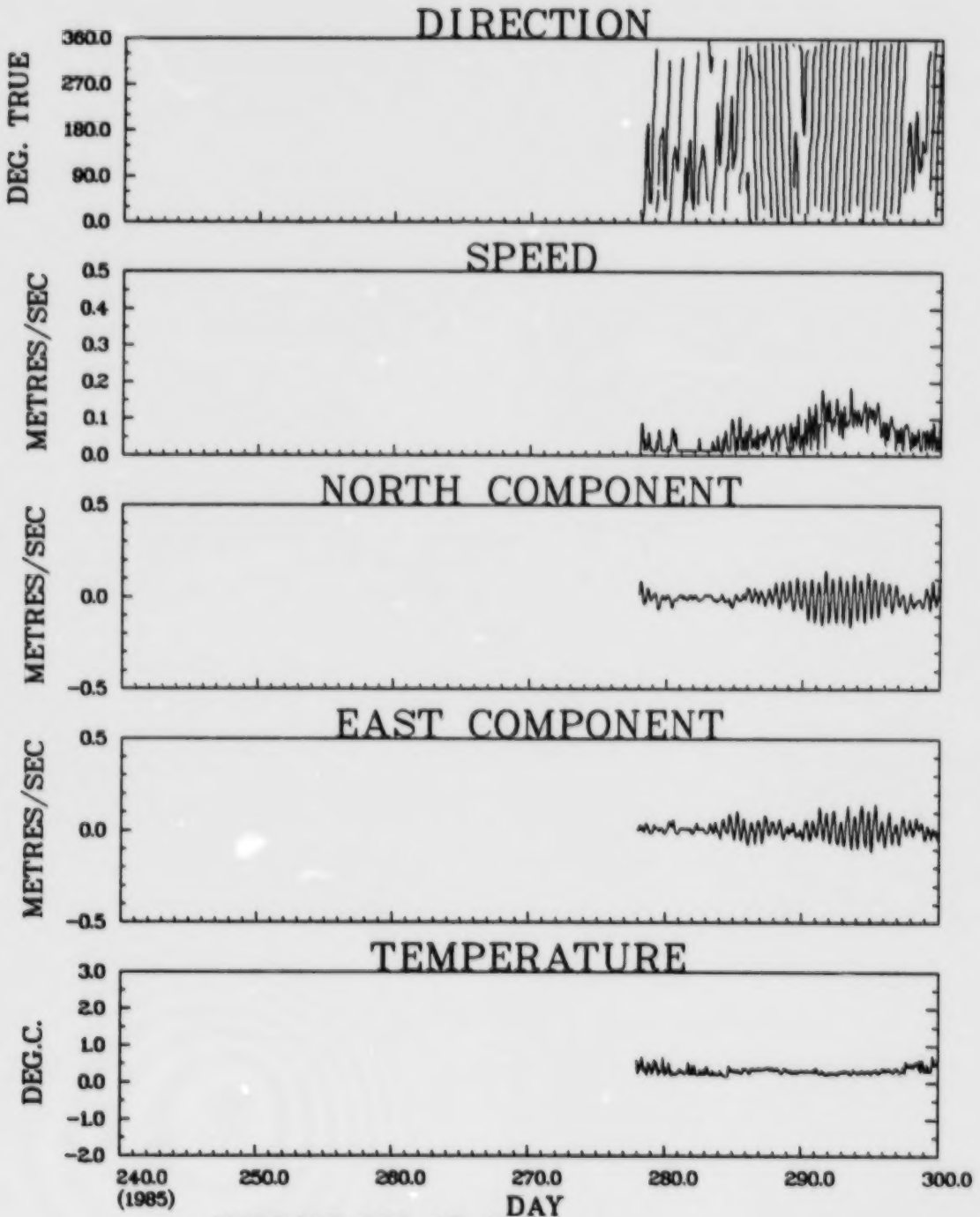
| | | | |
|---|---|---|---|
| Latitude | 74° 34.1N | Deployment | 2156Z 4 Oct., 1985 |
| Longitude | 72° 13.5W | Recovery | 0857Z 20 Aug., 1986 |
| Water Depth | 1013 m | Duration | 318 d |

## RECORD LENGTH STATISTICS

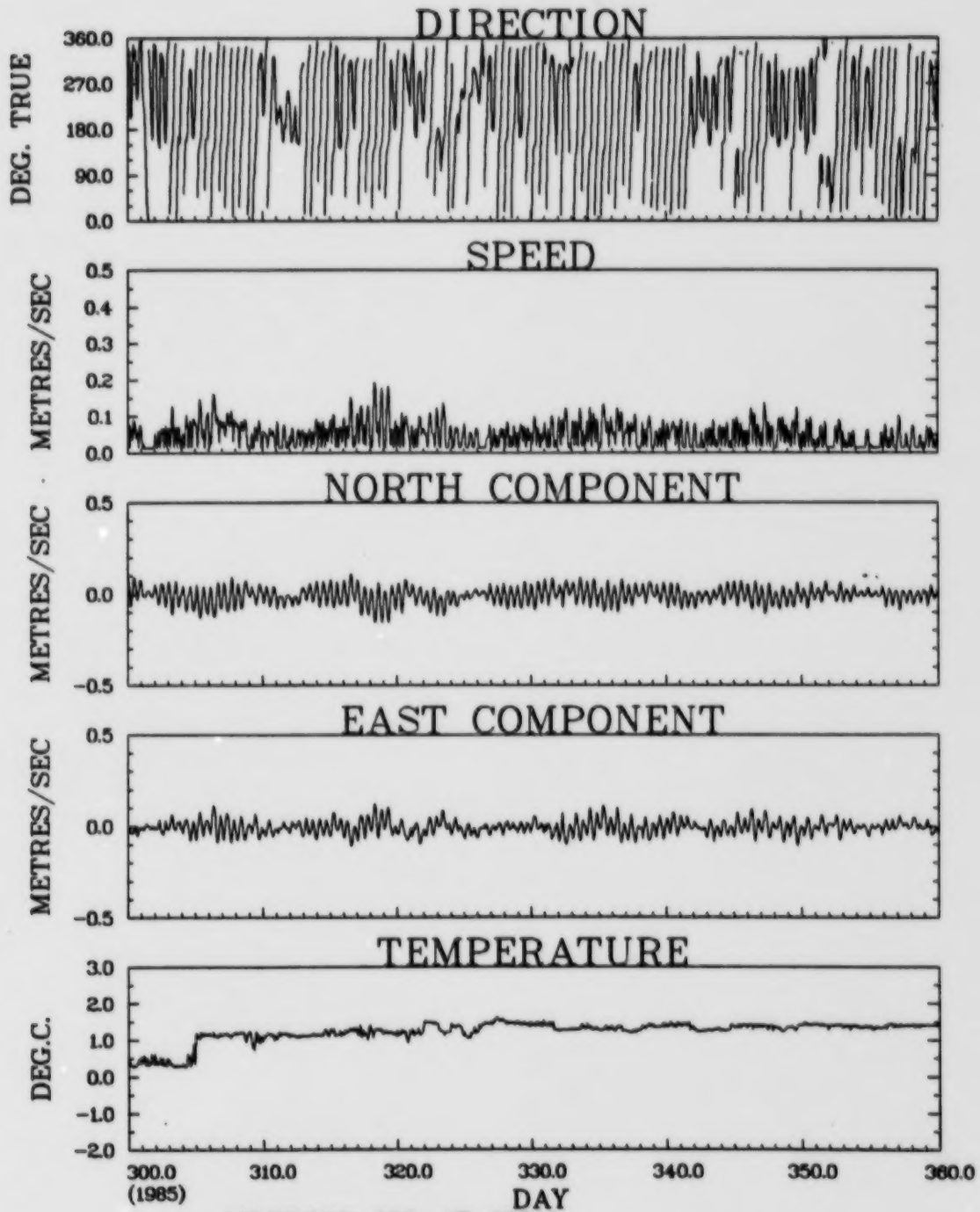
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7666 | 331 | 333 | 332 | 0.2 |
| Temperature (T) | °C | 7666 | 0.18 | 1.66 | 1.27 | 0.31 |
| Salinity (S) | PSS78 | 7622 | 34.09 | 34.49 | 34.31 | 0.08 |
| Speed (R) | $m.s^{-1}$ | 7666 | 0.015 | 0.192 | 0.052 | 0.031 |
| Northeast Component (V) | $m.s^{-1}$ | 7666 | -.130 | 0.130 | 0.001 | 0.028 |
| Southeast Component (U) | $m.s^{-1}$ | 7666 | -.158 | 0.191 | -.003 | 0.054 |

## MONTHLY MEANS

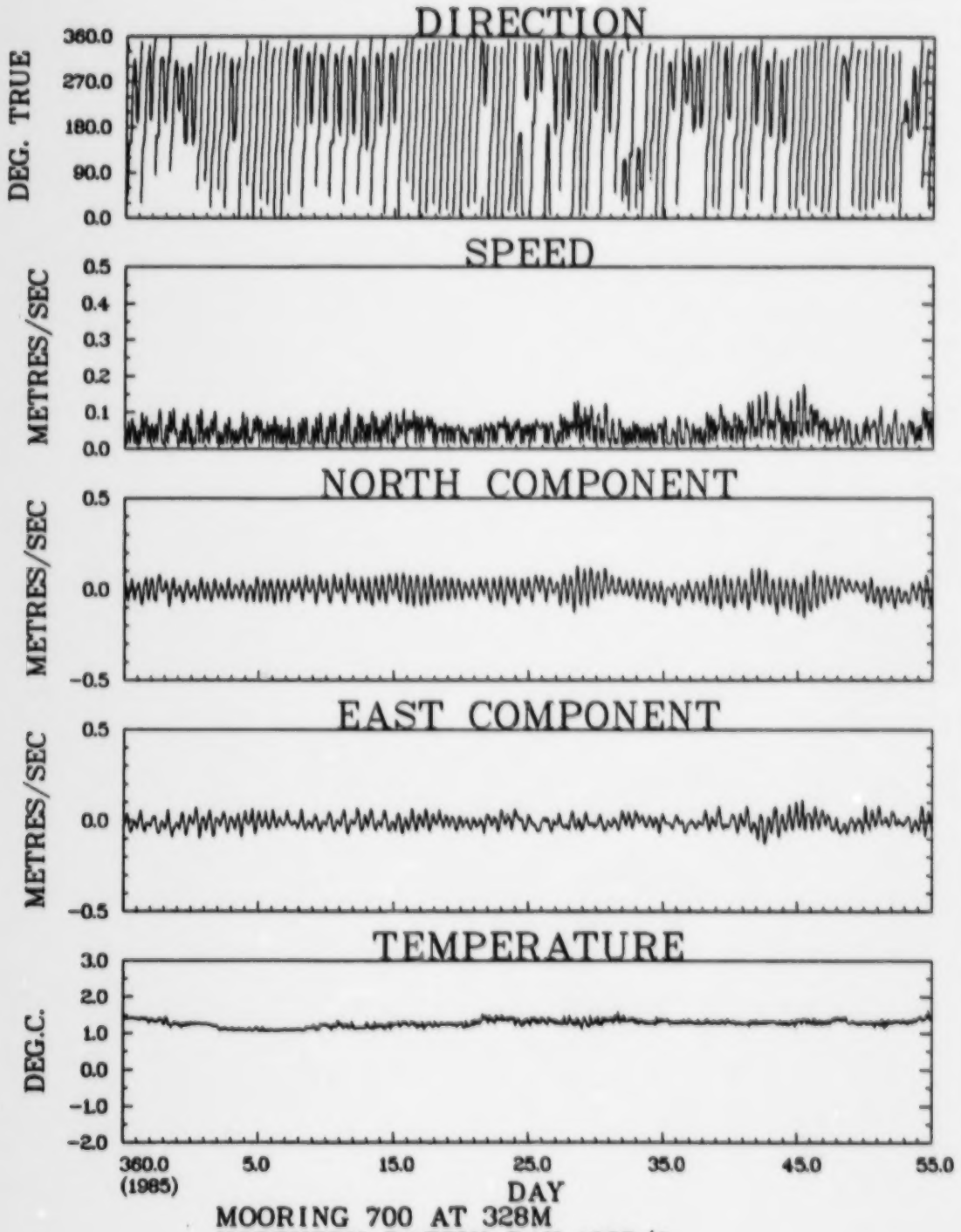
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 649 | 0.34±0.10 | 34.17±0.03 | 0.056±.037 | 0.003±.041 | 0.006±.052 |
| November | 720 | 1.25±0.14 | 34.25±0.03 | 0.056±.034 | -.014±.027 | 0.002±.059 |
| December | 744 | 1.35±0.07 | 34.26±0.03 | 0.046±.029 | -.009±.020 | -.000±.050 |
| January | 744 | 1.24±0.11 | 34.24±0.03 | 0.050±.027 | -.002±.030 | -.008±.048 |
| February | 672 | 1.33±0.07 | 34.28±0.02 | 0.061±.034 | -.009±.031 | 0.005±.062 |
| March | 744 | 1.51±0.07 | 34.36±0.02 | 0.052±.030 | 0.004±.022 | -.005±.055 |
| April | 720 | 1.33±0.12 | 34.35±0.02 | 0.051±.030 | 0.008±.022 | -.006±.054 |
| May | 744 | 1.36±0.06 | 34.36±0.02 | 0.057±.030 | 0.002±.028 | -.006±.058 |
| June | 720 | 1.36±0.07 | 34.38±0.02 | 0.051±.030 | 0.014±.023 | -.011±.051 |
| July | 744 | 1.40±0.12 | 34.40±0.02 | 0.048±.030 | 0.011±.023 | -.002±.051 |
| August | 465 | 1.43±0.12 | 34.42±0.02 | 0.040±.026 | 0.005±.018 | -.002±.044 |



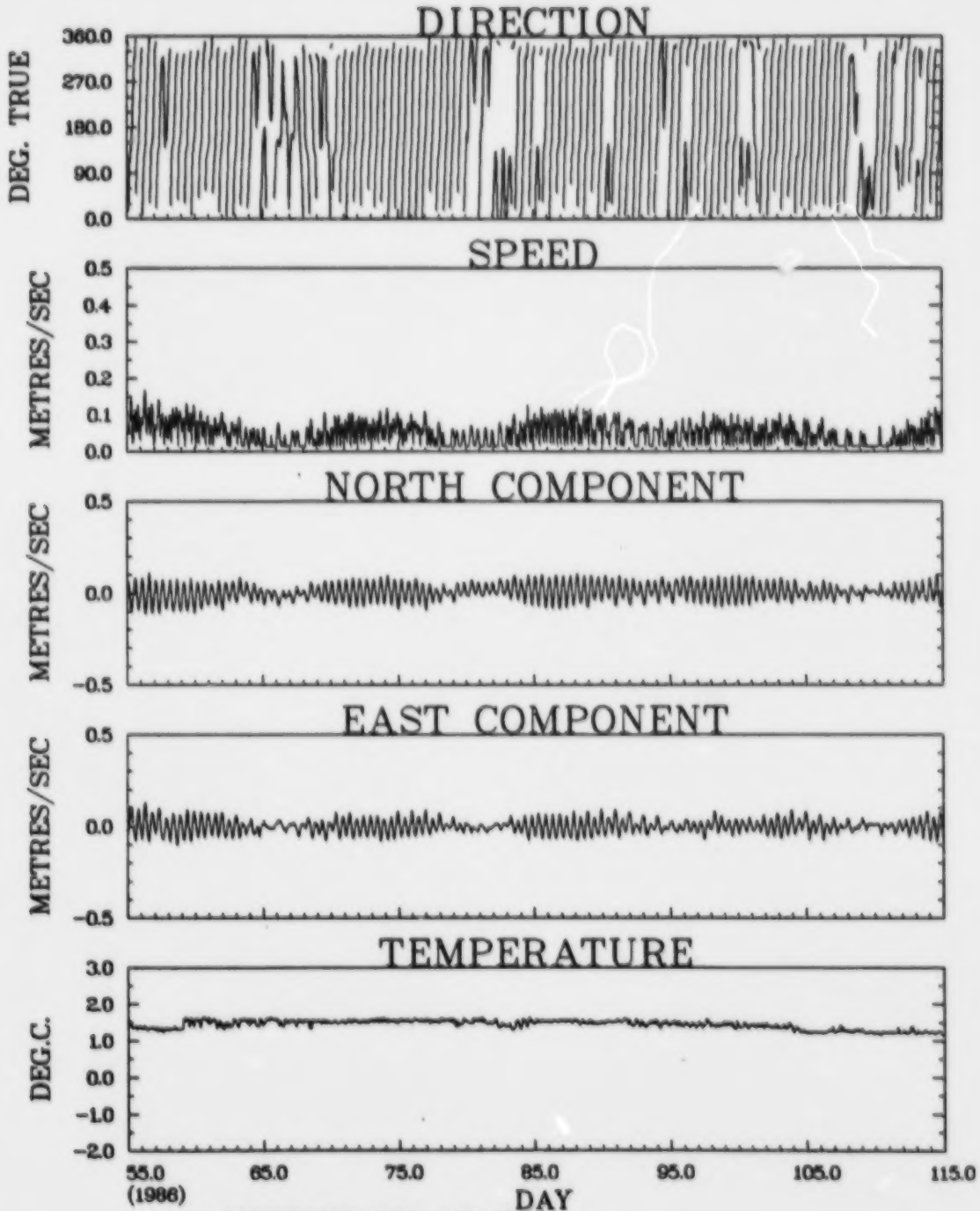

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



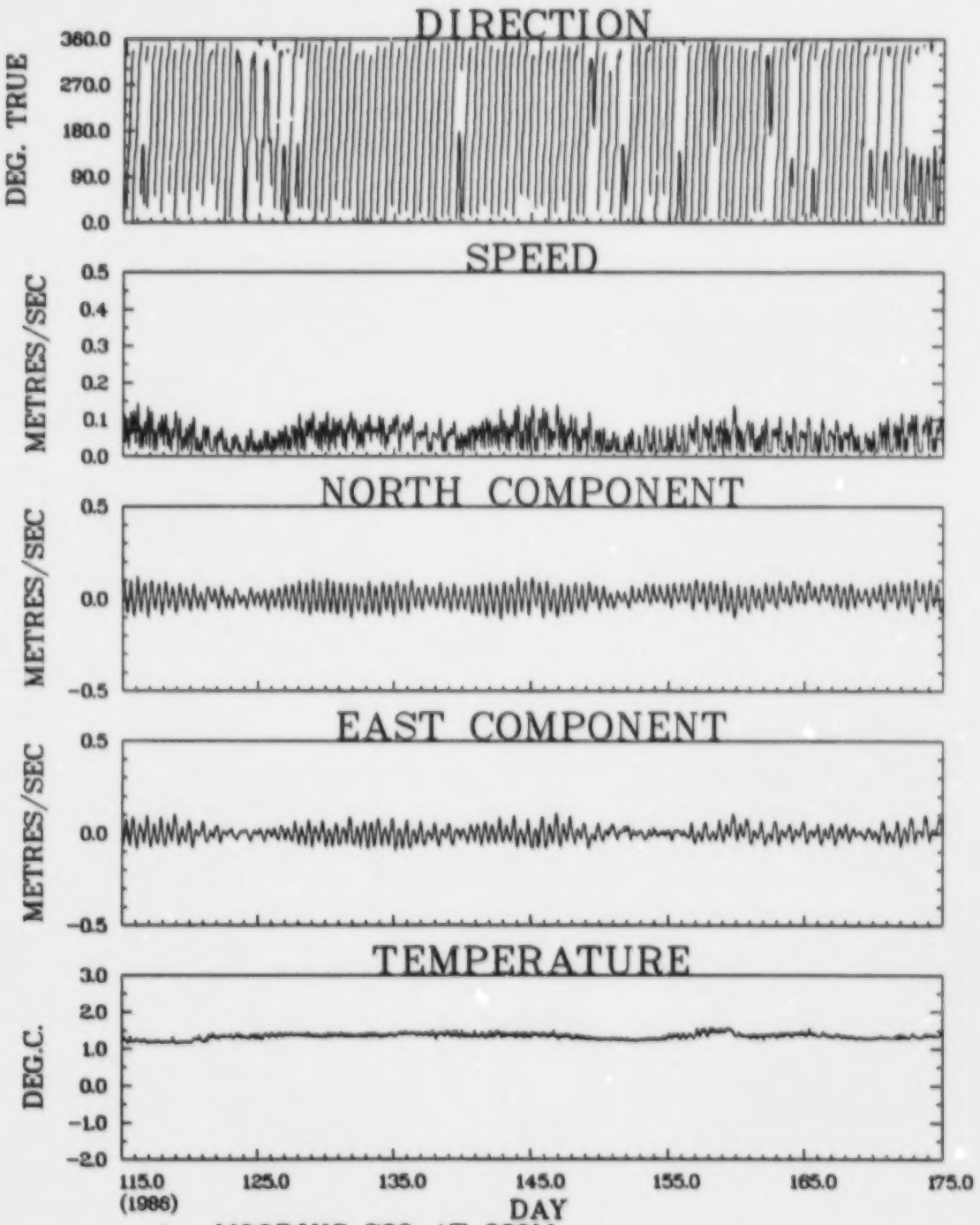

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



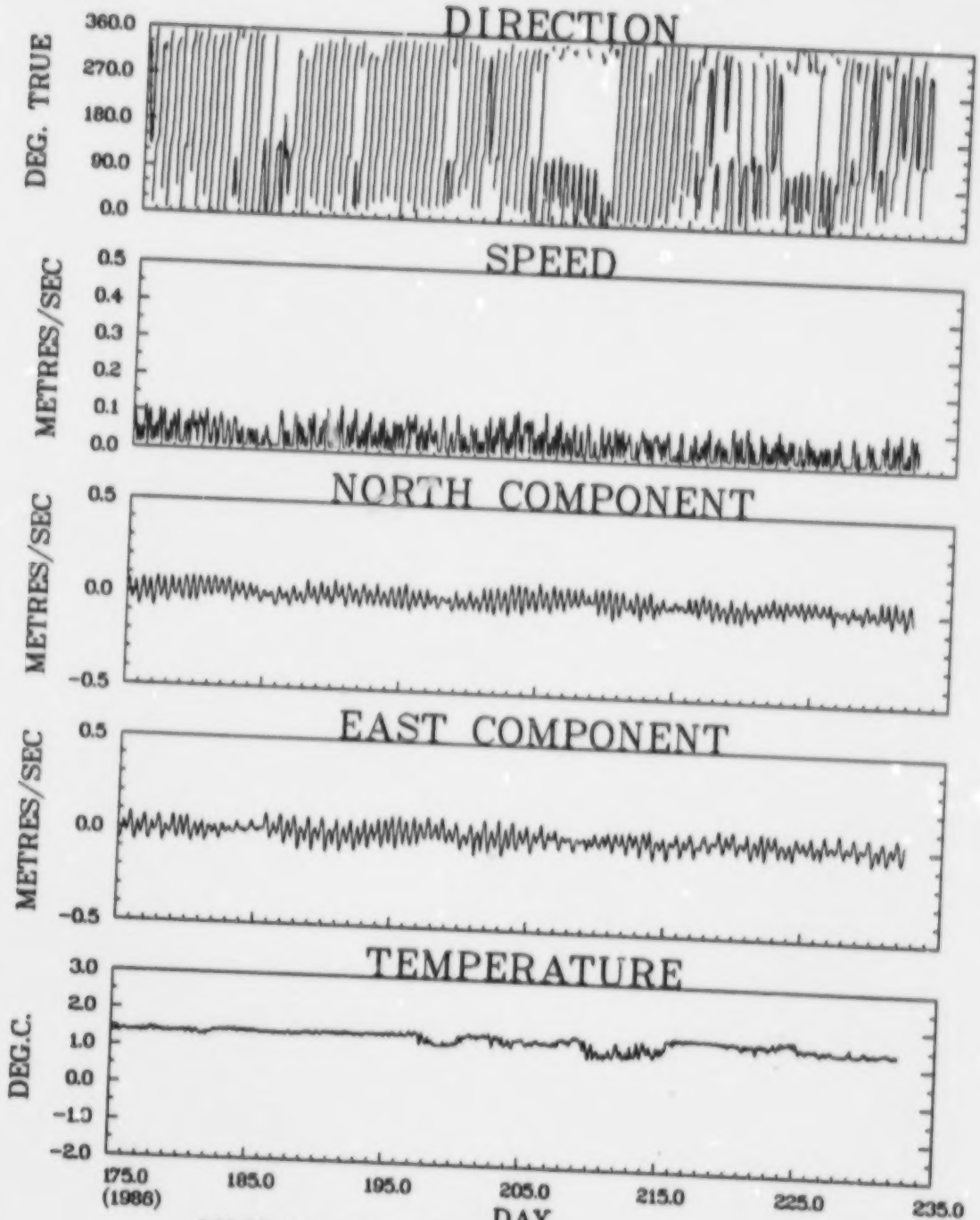

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



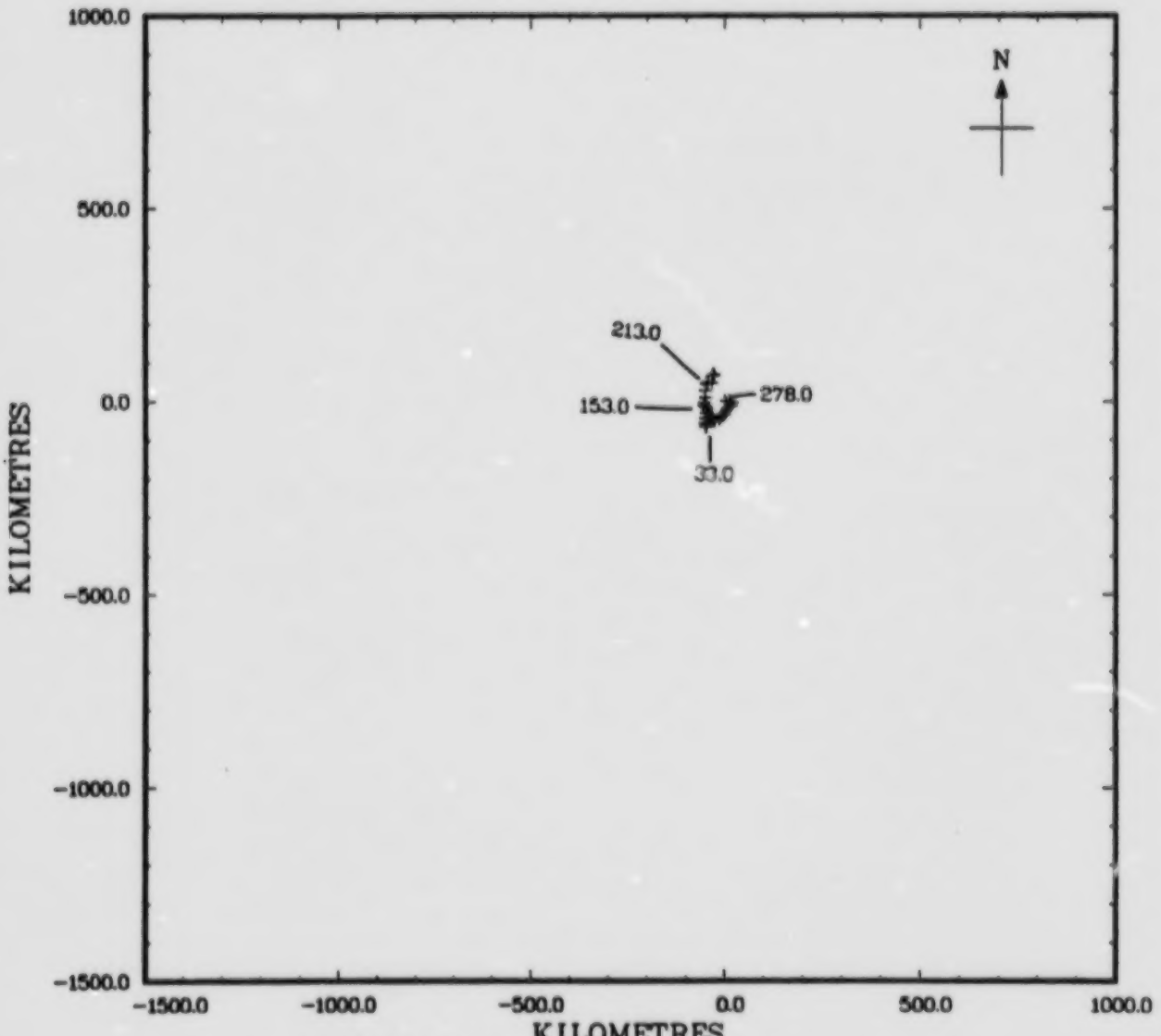

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



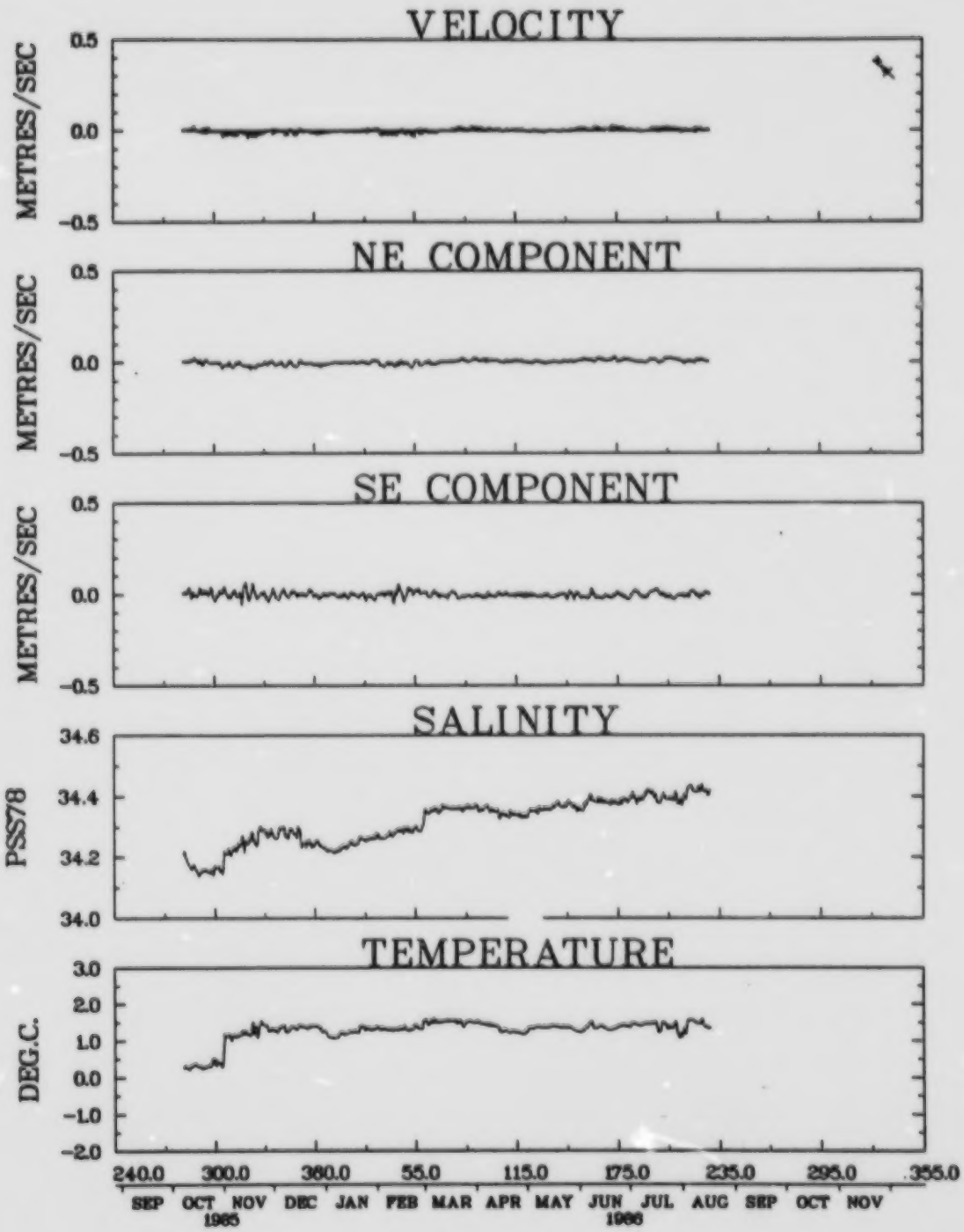

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



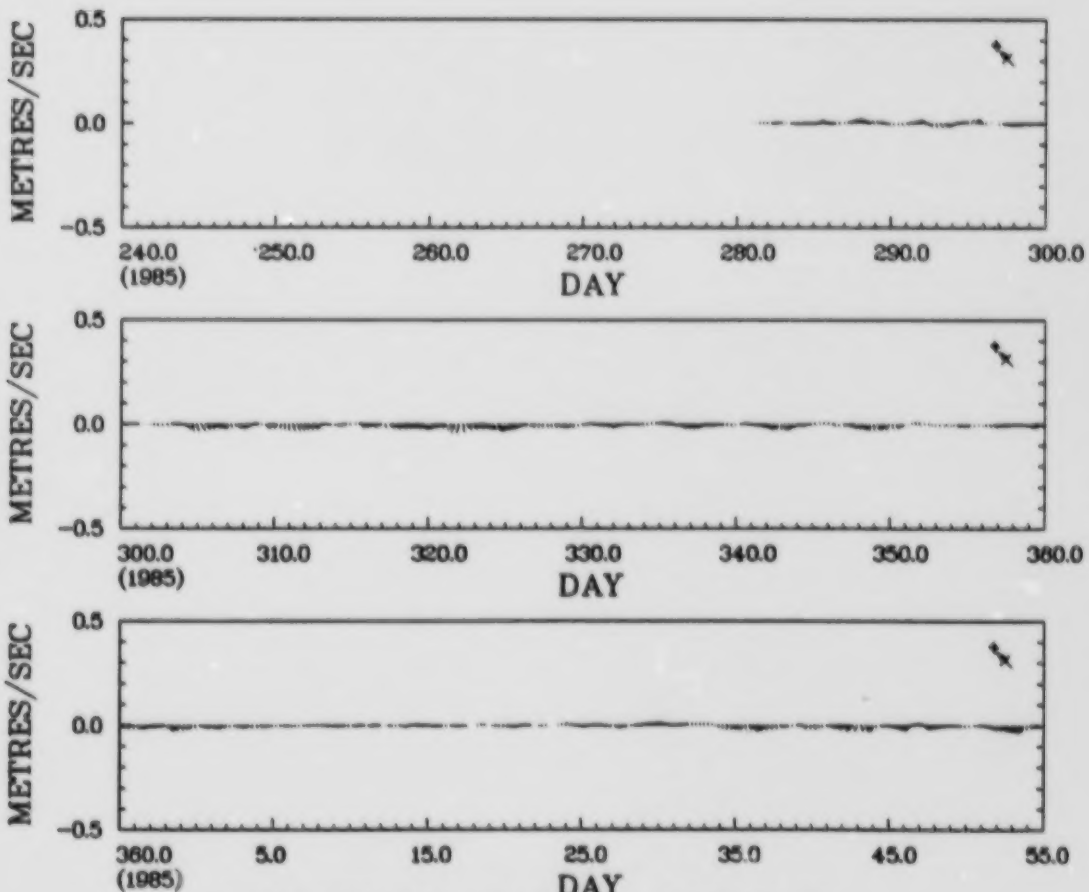

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6



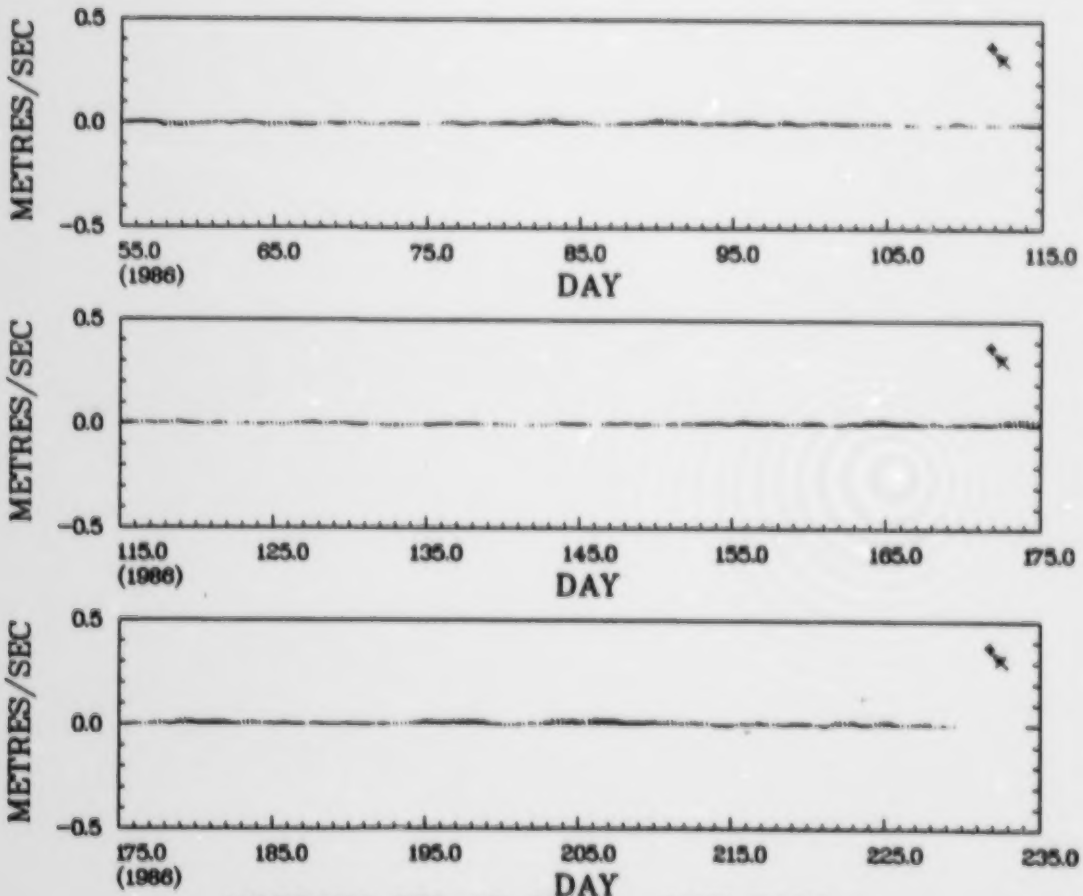

MOORING 700 AT 328M
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 328M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 328M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



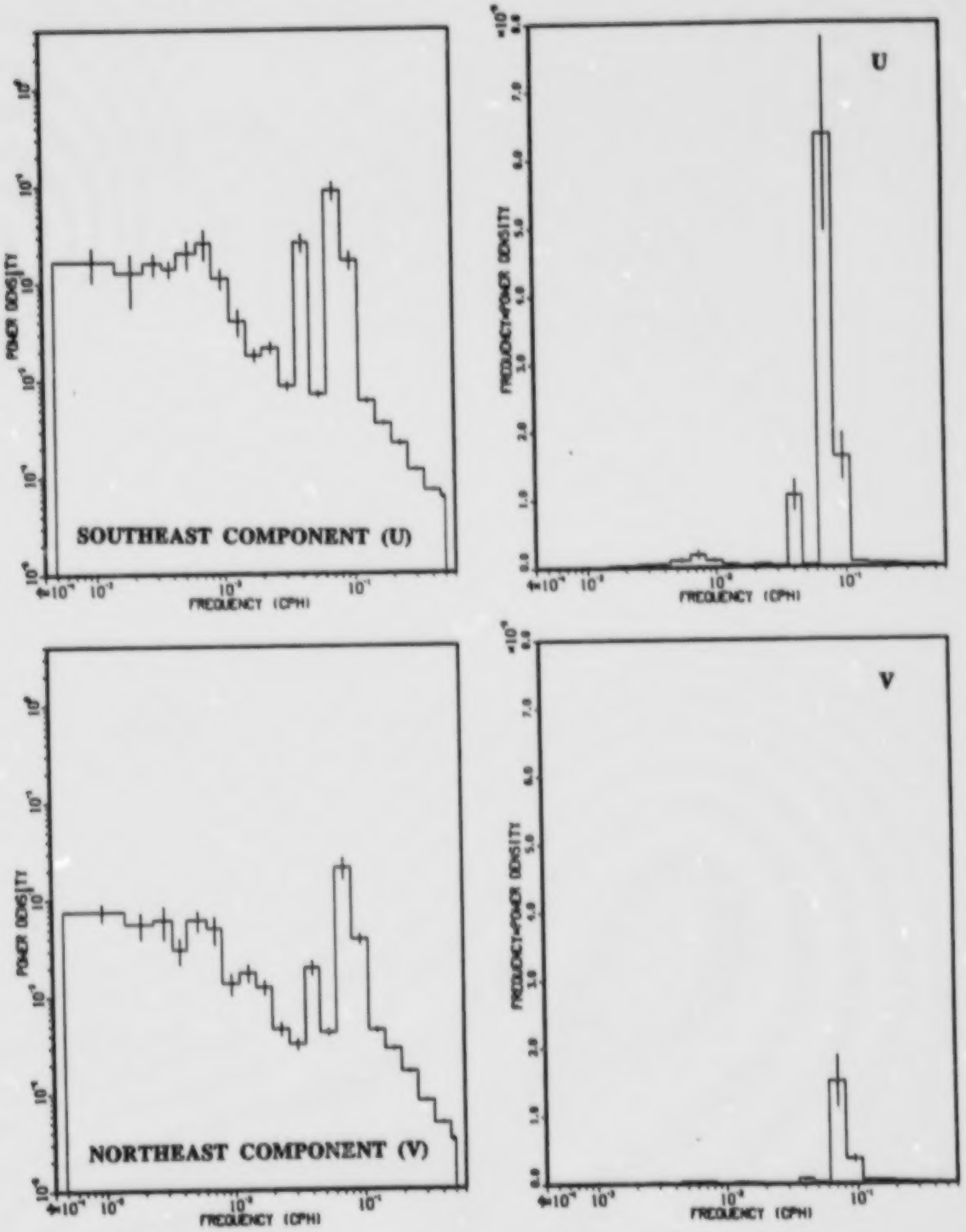

MOORING 700 AT 328M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 700**
**Depth 328 m**

**Tidal Analysis**

319.4 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .018 | .001 | 123 | 91 | C | .010 | 275 | .015 | 89 |
| O1 | .010 | .001 | 121 | 40 | C | .005 | 233 | .008 | 35 |
| P1 | .006 | .000 | 118 | 87 | C | .003 | 275 | .006 | 85 |
| M2 | .061 | .014 | 331 | 24 | C | .054 | 31 | .032 | 182 |
| S2 | .025 | .004 | 131 | 268 | C | .017 | 98 | .019 | 260 |
| N2 | .008 | .002 | 120 | 211 | A | .004 | 3 | .007 | 220 |
| K2 | .008 | .002 | 131 | 268 | C | .005 | 101 | .006 | 259 |
| MF | .003 | .002 | 352 | 12 | C | .003 | 17 | .002 | 115 |
| M4 | .000 | .000 | 343 | 90 | A | .000 | 81 | .000 | 331 |
| MS4 | .001 | .000 | 346 | 175 | C | .001 | 176 | .000 | 329 |




MOORING 700 AT 328M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 700**
**Depth 478 m**

| | | | |
|---|---|---|---|
| Latitude | 74° 34.1N | Deployment | 2156Z 4 Oct., 1985 |
| Longitude | 72° 13.5W | Recovery | 0857Z 20 Aug., 1986 |
| Water Depth | 1013 m | Duration | 318 d |

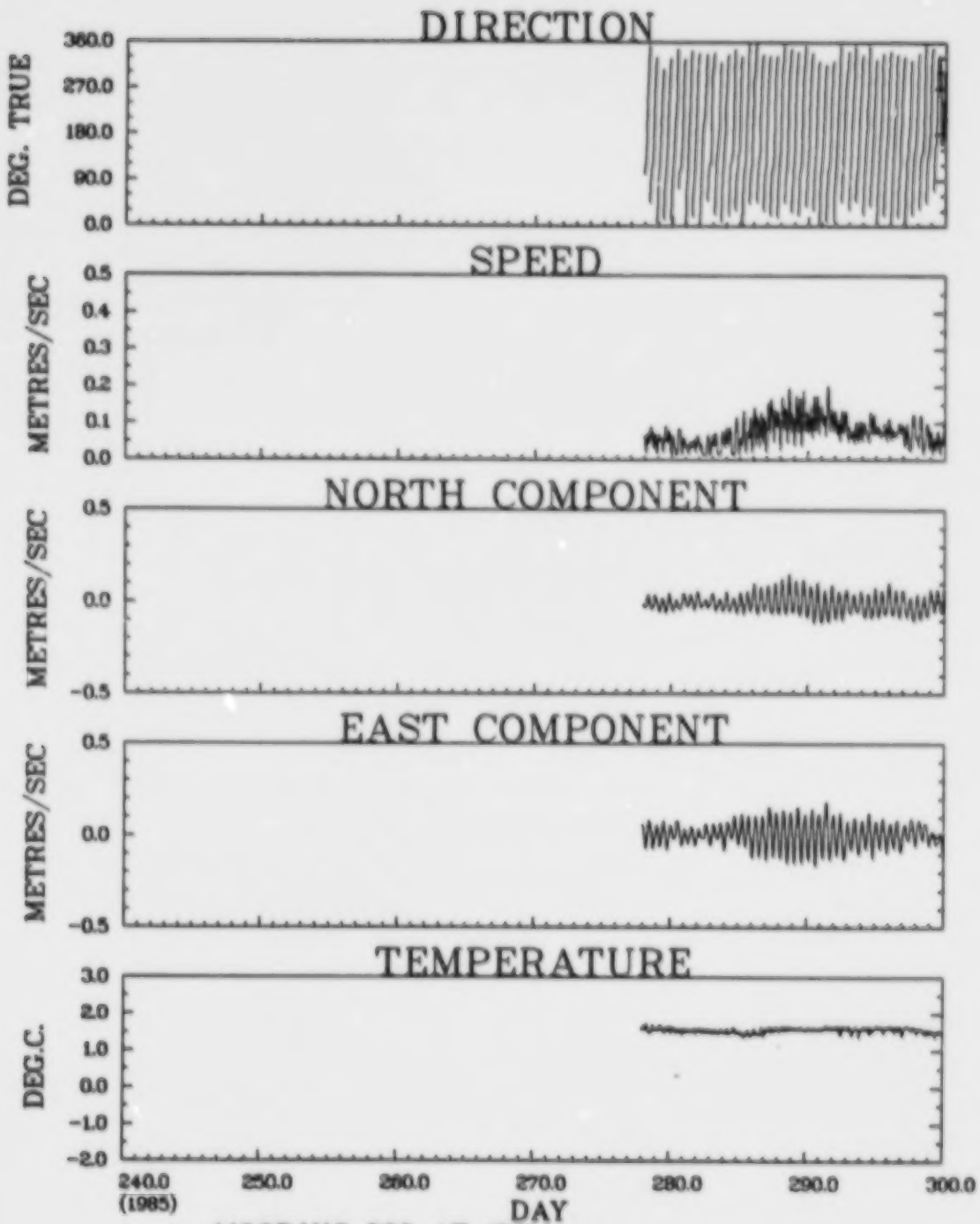
## RECORD LENGTH STATISTICS

| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7666 | 502 | 520 | 510 | 6.2 |
| Temperature (T) | °C | 7666 | 0.79 | 2.09 | 1.83 | 0.16 |
| Salinity (S) | PSS78 | 7666 | 34.27 | 34.74 | 34.48 | 0.04 |
| Speed (R) | $m.s^{-1}$ | 6772 | 0.015 | 0.224 | 0.059 | 0.032 |
| Northeast Component (V) | $m.s^{-1}$ | 6772 | -.110 | 0.092 | 0.002 | 0.029 |
| Southeast Component (U) | $m.s^{-1}$ | 6772 | -.209 | 0.218 | 0.001 | 0.060 |

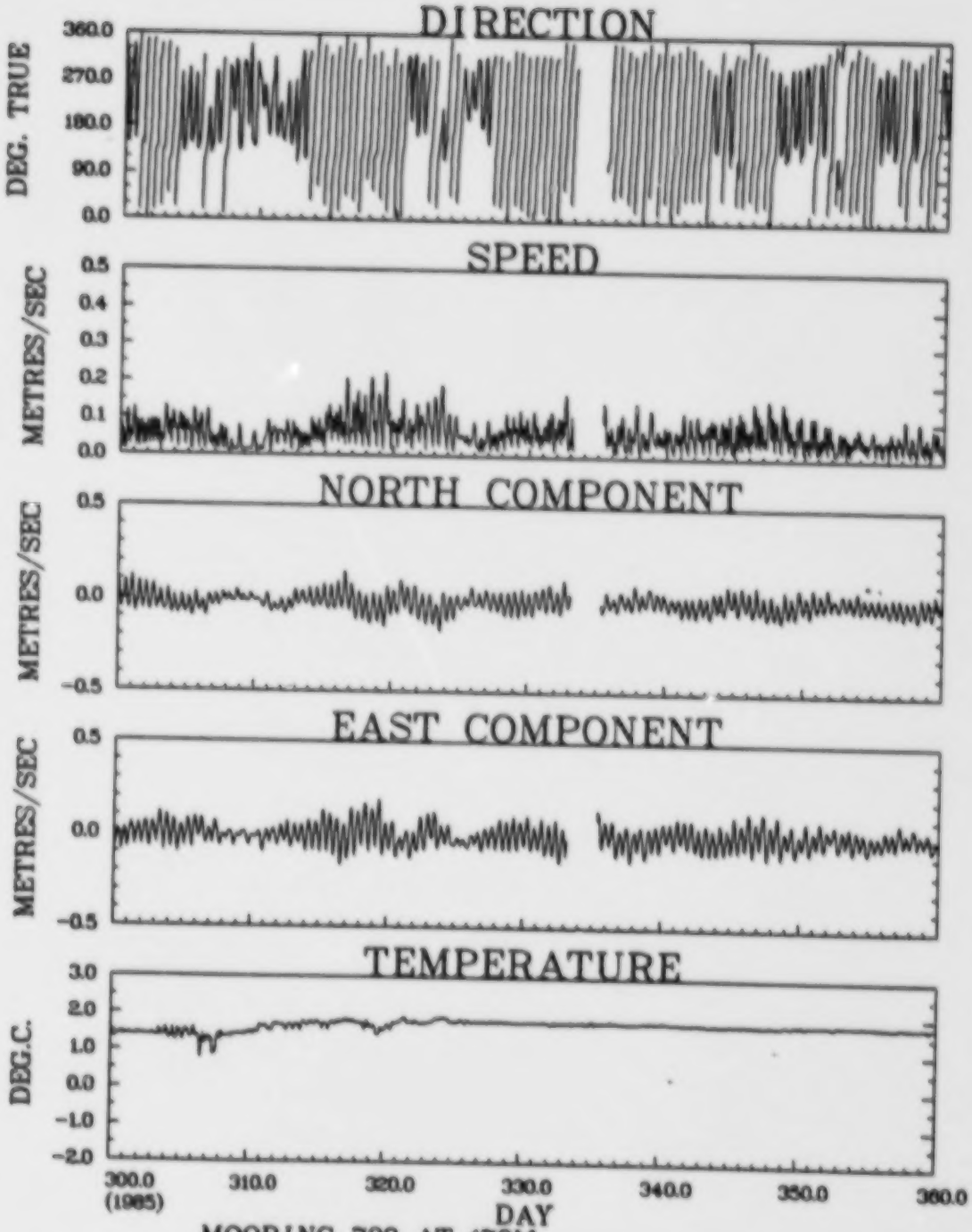
## MONTHLY MEANS

| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 649 | 1.54±0.09 | 34.42±0.03 | 0.074±.037 | 0.001±.041 | 0.009±.071 |
| November | 720[a] | 1.68±0.18 | 34.43±0.04 | 0.067±.039 | -.015±.032 | 0.008±.069 |
| December | 744[b] | 1.77±0.03 | 34.45±0.02 | 0.061±.030 | -.009±.027 | 0.005±.062 |
| January | 744 | 1.85±0.11 | 34.47±0.03 | 0.063±.030 | -.002±.028 | -.004±.064 |
| February | 672 | 1.86±0.07 | 34.46±0.03 | 0.069±.032 | -.014±.033 | 0.012±.067 |
| March | 744 | 2.02±0.04 | 34.50±0.02 | 0.056±.027 | 0.008±.022 | -.003±.057 |
| April | 720[c] | 1.95±0.04 | 34.48±0.03 | 0.053±.029 | 0.013±.021 | -.006±.055 |
| May | 744[d] | 1.98±0.02 | 34.50±0.02 | 0.053±.034 | 0.007±.016 | 0.001±.060 |
| June | 720[e] | 1.88±0.11 | 34.51±0.03 | 0.052±.027 | 0.021±.020 | -.008±.051 |
| July | 744 | 1.73±0.05 | 34.51±0.03 | 0.045±.026 | 0.014±.016 | -.001±.047 |
| August | 465[f] | 1.73±0.02 | 34.53±0.04 | 0.042±.027 | 0.006±.019 | -.003±.046 |

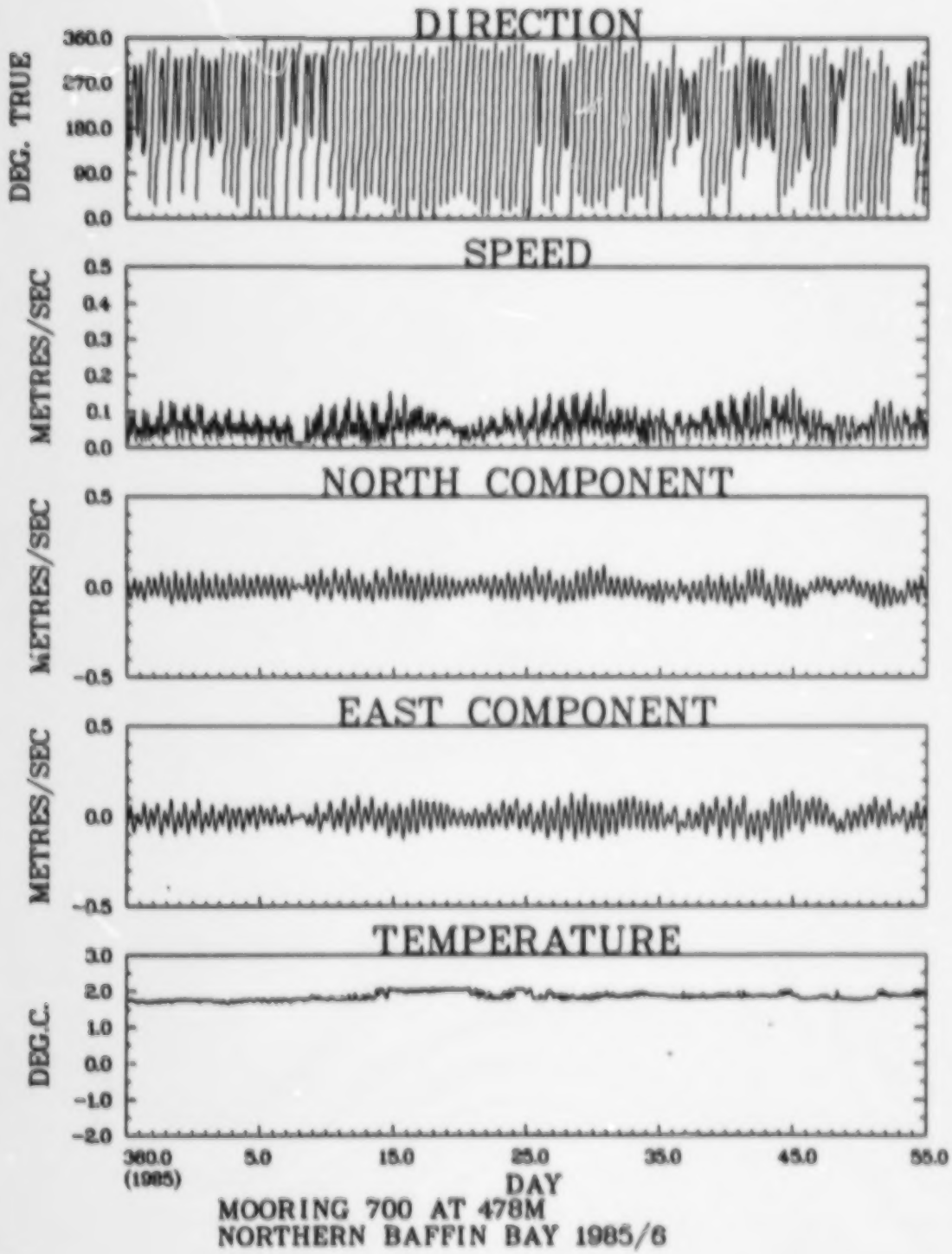
Notes:
[a] speeds have only 676 samples
[b] speeds have only 735 samples
[c] speeds have only 690 samples
[d] speeds have only 198 samples
[e] speeds have only 536 samples
[f] speeds have only 384 samples



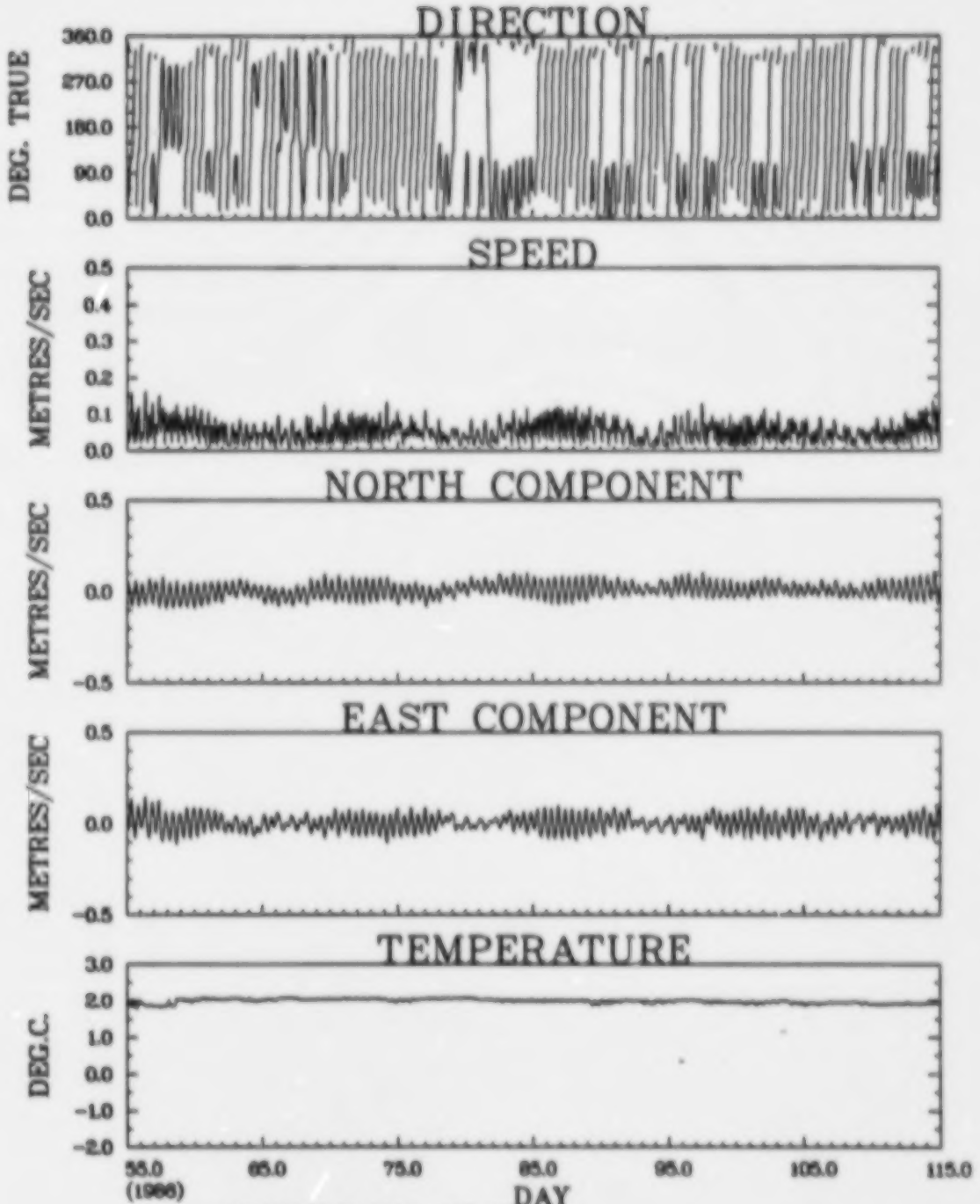

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



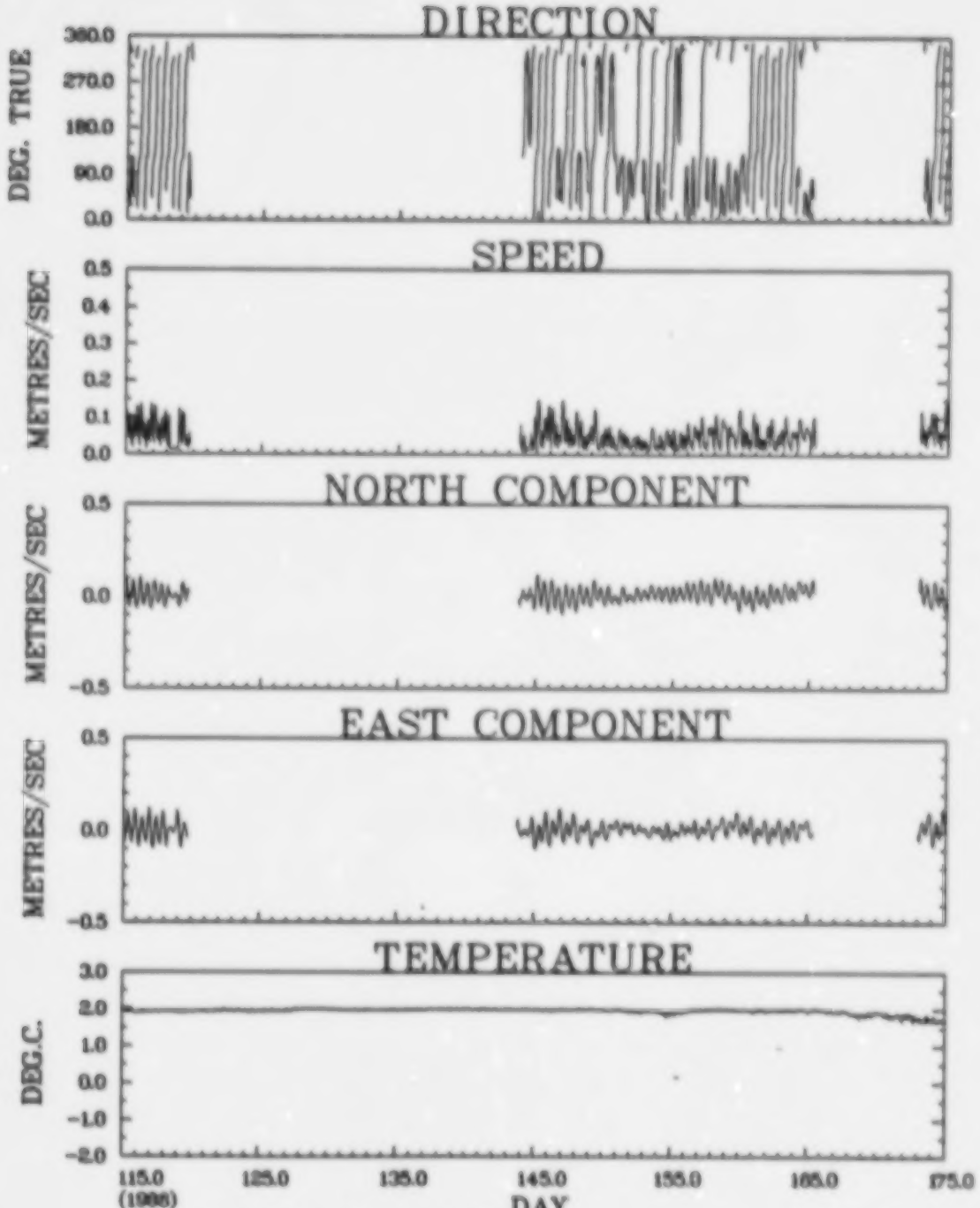

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



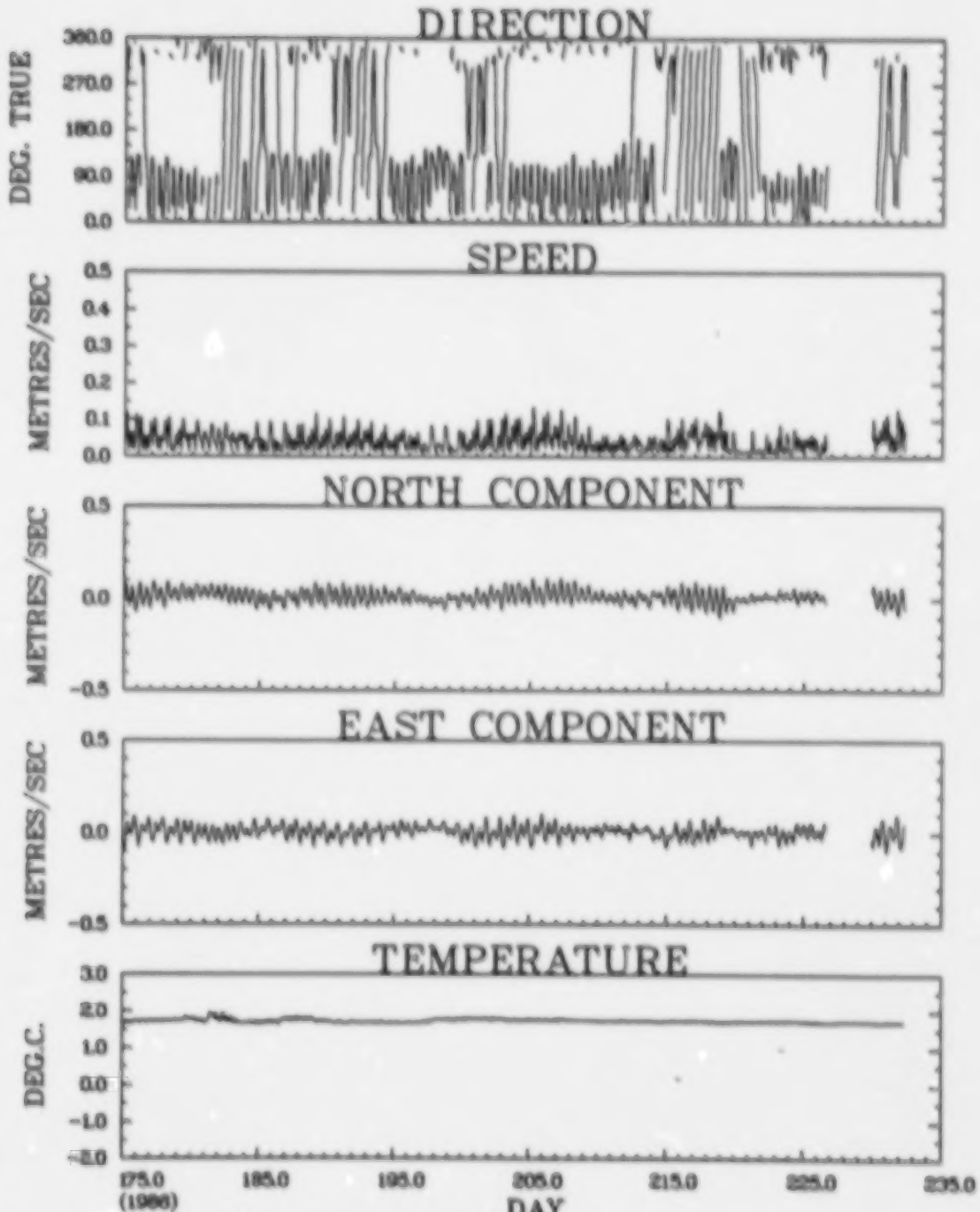

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



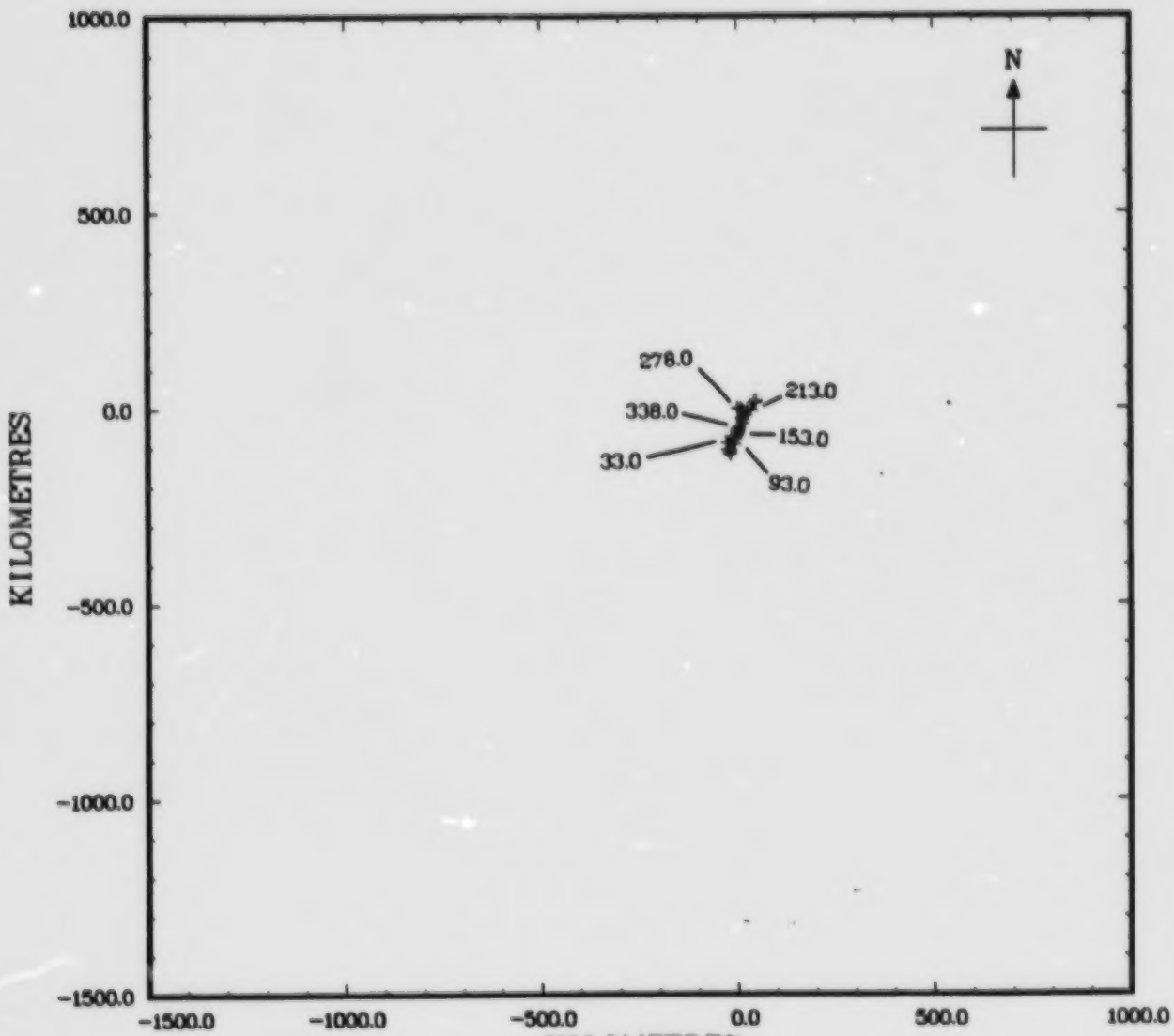

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



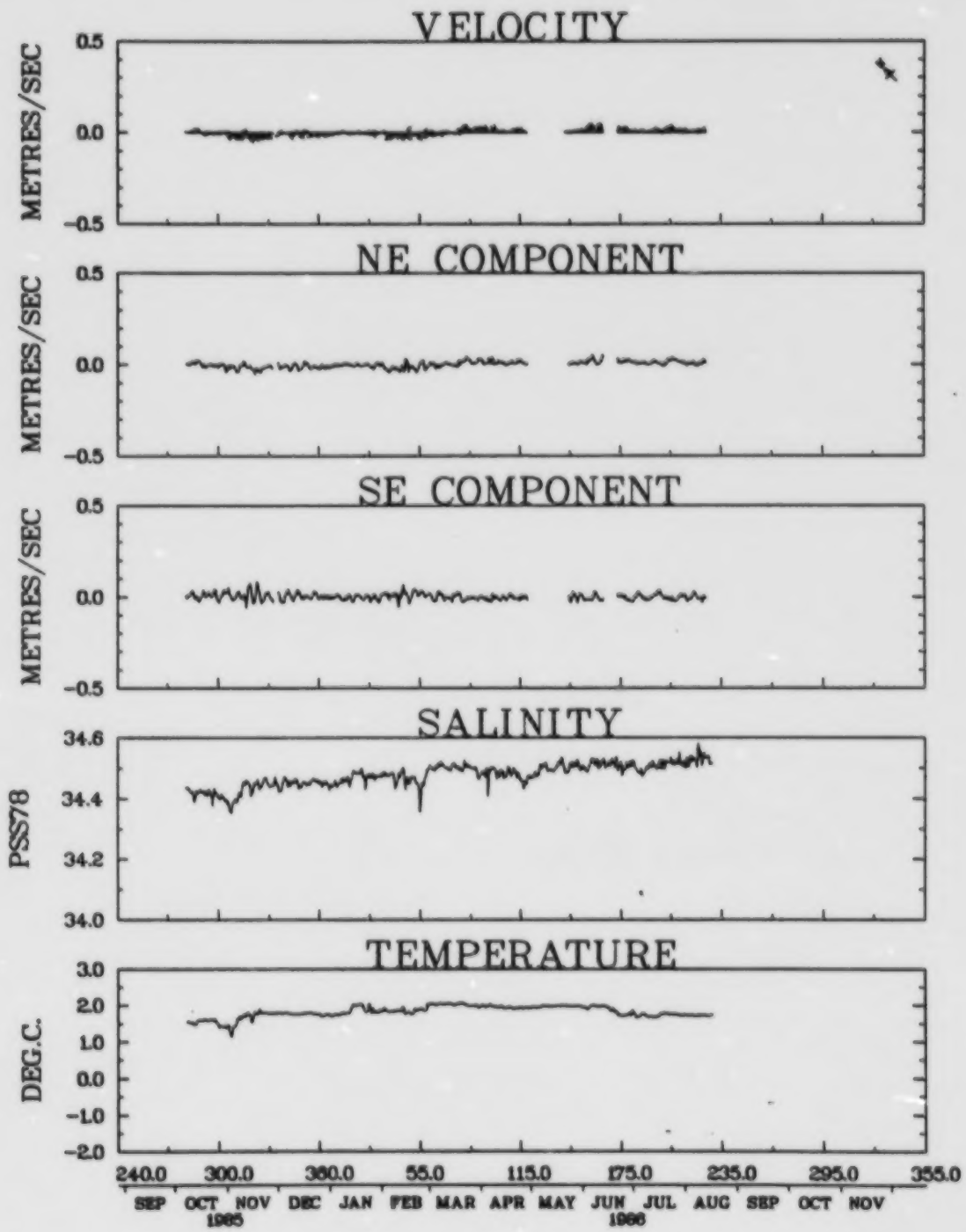

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



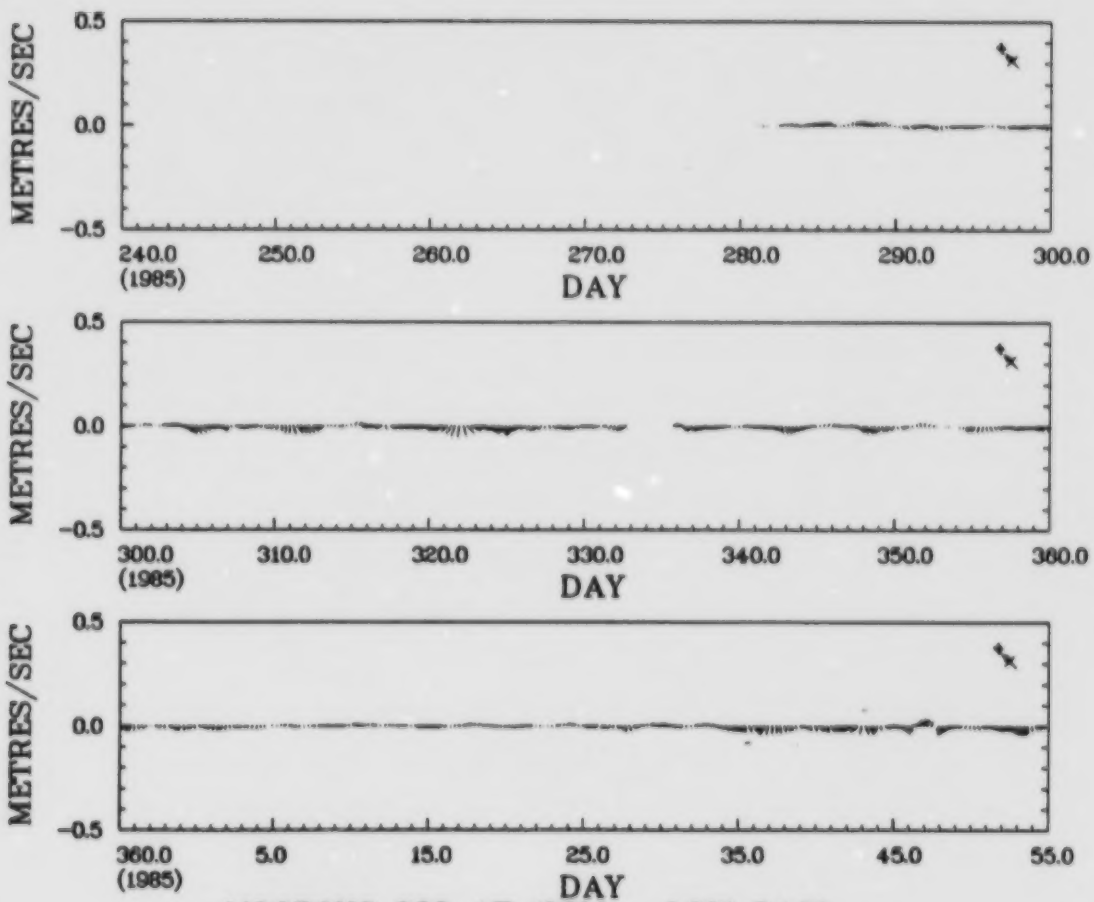

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6



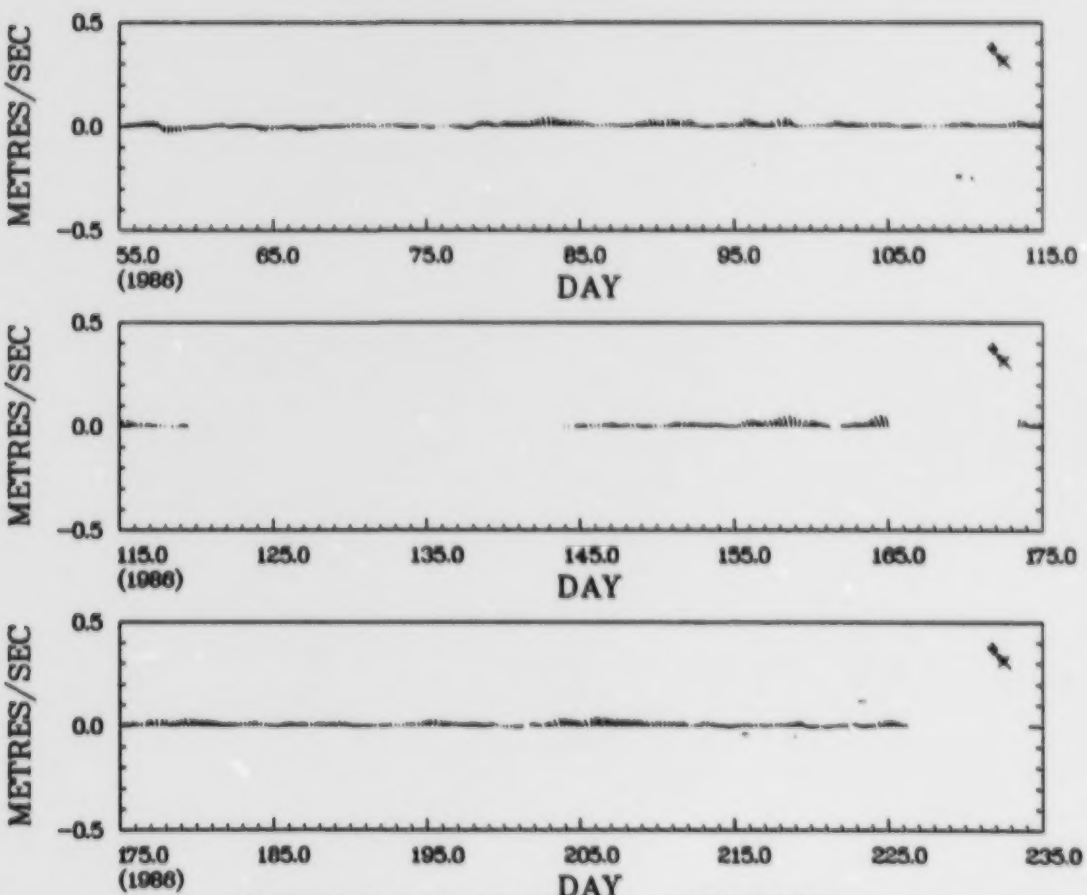

MOORING 700 AT 478M
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 478M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 700 AT 478M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



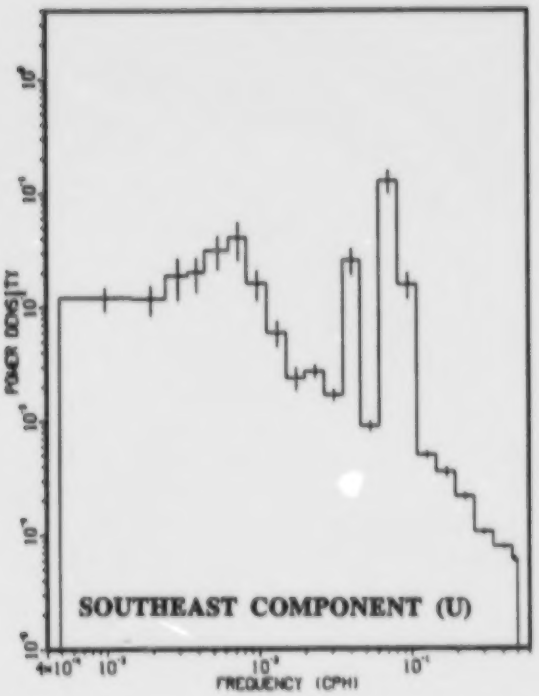

MOORING 700 AT 478M – LOW PASS
NORTHERN BAFFIN BAY 1985/6

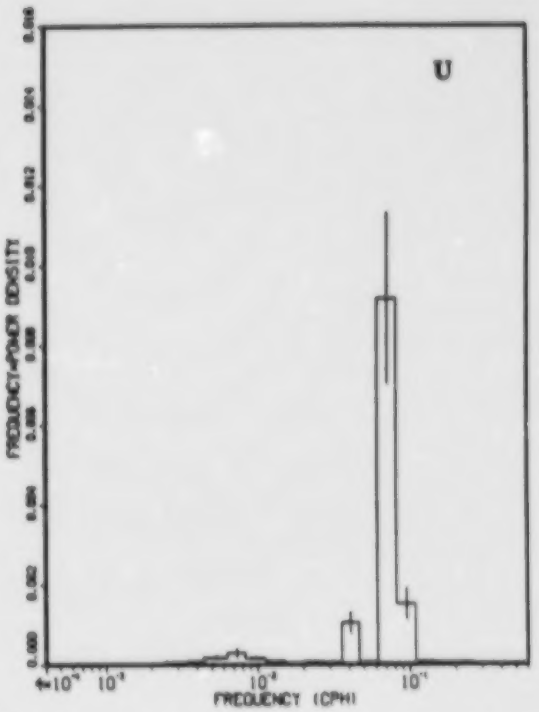
**Mooring 700**
**Depth 478 m**

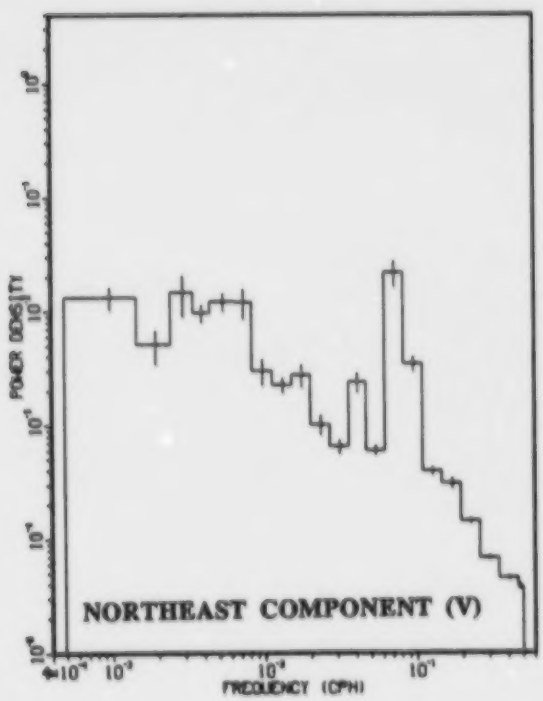
**Tidal Analysis**

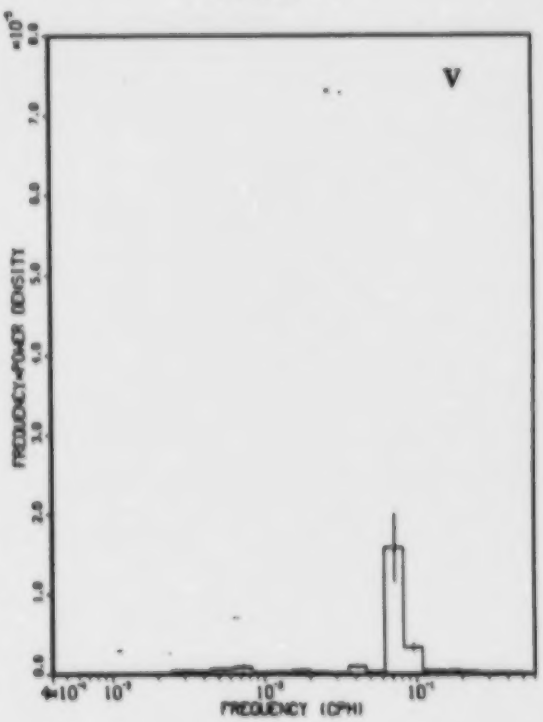
319.4 d centred at day 072,1986
(37.2 d gap in data)

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .016 | .001 | 120 | 93 | C | .008 | 277 | .014 | 92 |
| O1 | .009 | .001 | 121 | 37 | C | .005 | 225 | .008 | 34 |
| P1 | .006 | .000 | 119 | 71 | C | .003 | 257 | .005 | 70 |
| M2 | .064 | .019 | 131 | 225 | C | .044 | 64 | .050 | 210 |
| S2 | .021 | .001 | 129 | 271 | C | .013 | 94 | .016 | 270 |
| N2 | .009 | .000 | 133 | 189 | A | .006 | 7 | .007 | 191 |
| K2 | .005 | .001 | 109 | 269 | A | .002 | 65 | .005 | 272 |
| MF | .004 | .001 | 352 | 7 | C | .004 | 11 | .002 | 116 |
| M4 | .002 | .000 | 13 | 144 | C | .002 | 141 | .001 | 186 |
| MS4 | .001 | .000 | 9 | 172 | A | .001 | 172 | .000 | 169 |




MOORING 700 AT 478M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 701**
**Depth 193 m**

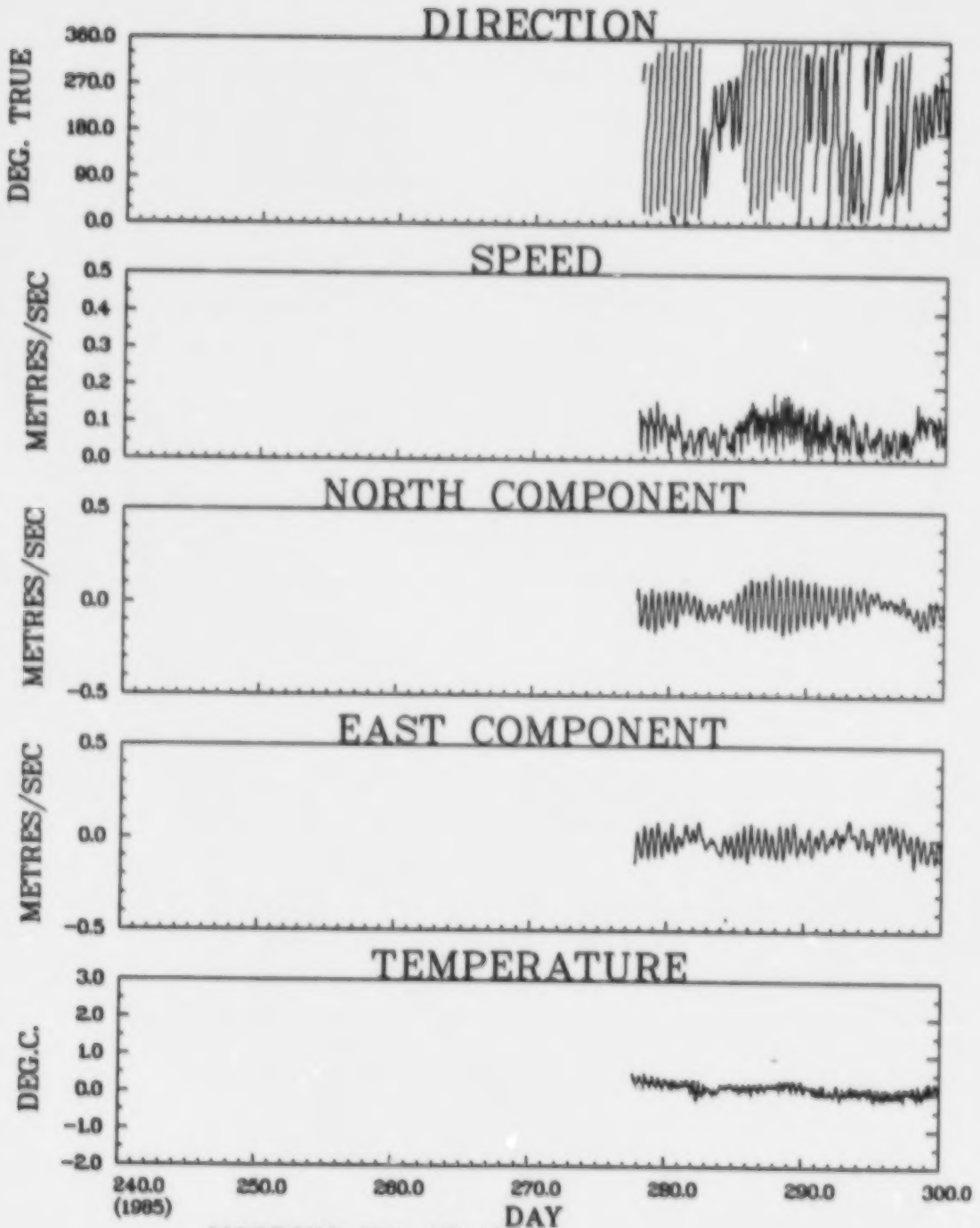
| | | | |
|---|---|---|---|
| Latitude | 75° 20.4N | Deployment | 1353Z 4 Oct., 1985 |
| Longitude | 74° 21.8W | Recovery | 1949Z 20 Aug., 1986 |
| Water Depth | 533 m | Duration | 320 d |

**RECORD LENGTH STATISTICS**

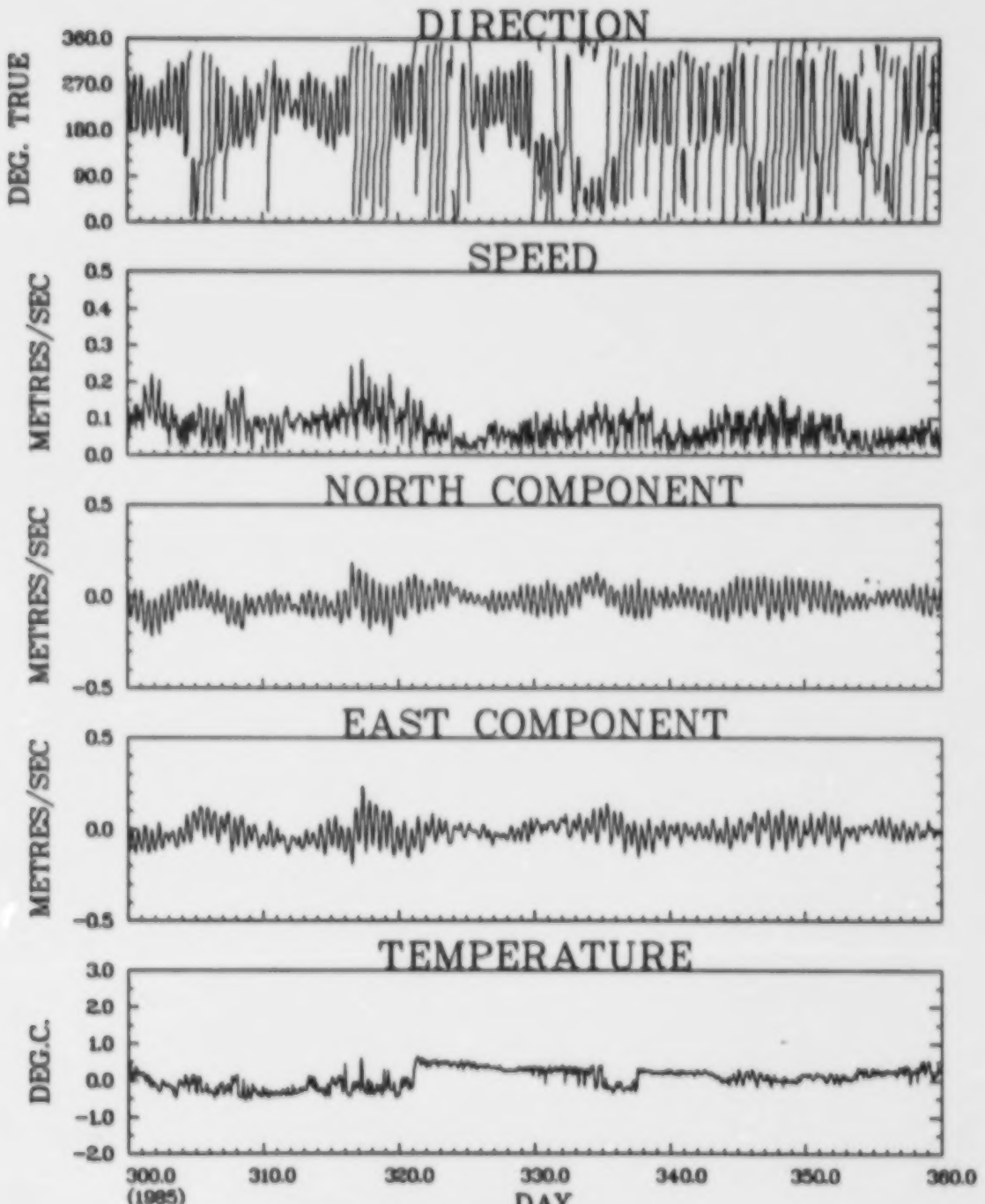
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7685 | 194 | 195 | 194 | 0.1 |
| Temperature (T) | °C | 7685 | -1.71 | 0.93 | 0.25 | 0.37 |
| Salinity (S) | PSS78 | 7679 | 33.70 | 34.22 | 34.03 | 0.07 |
| Speed (R) | $m.s^{-1}$ | 7685 | 0.015 | 0.261 | 0.085 | 0.040 |
| Northeast Component (V) | $m.s^{-1}$ | 7685 | -.194 | 0.164 | -.030 | 0.052 |
| Southeast Component (U) | $m.s^{-1}$ | 7685 | -.243 | 0.251 | 0.001 | 0.073 |

**MONTHLY MEANS**

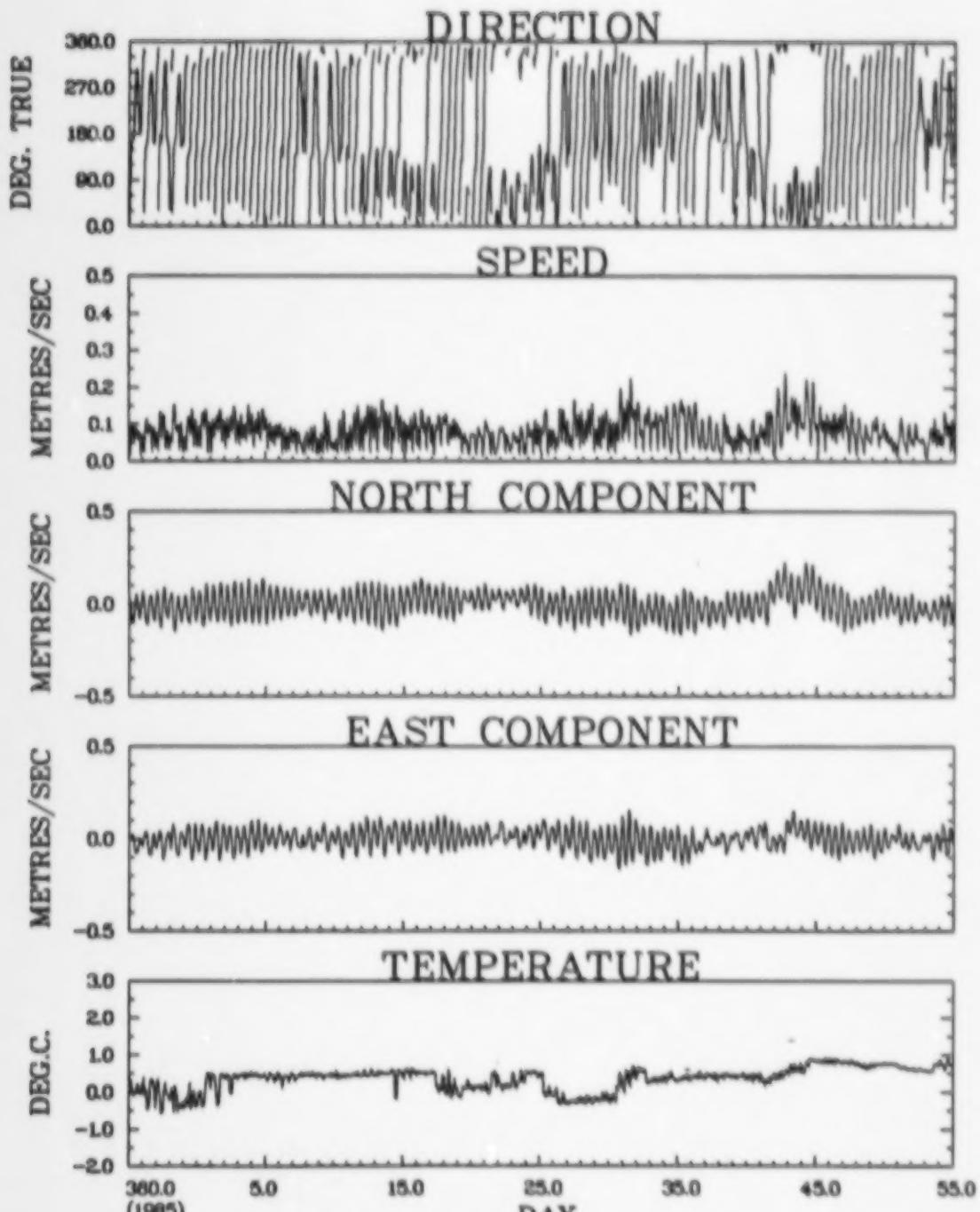
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 657 | 0.09±0.16 | 33.99±0.05 | 0.084±.038 | -.024±.055 | 0.001±.070 |
| November | 720 | 0.04±0.32 | 34.03±0.05 | 0.081±.041 | -.022±.050 | 0.004±.073 |
| December | 744 | 0.08±0.20 | 34.03±0.03 | 0.069±.034 | -.011±.036 | 0.003±.067 |
| January | 744 | 0.28±0.28 | 34.05±0.03 | 0.080±.035 | 0.011±.039 | -.001±.078 |
| February | 672 | 0.60±0.18 | 34.11±0.04 | 0.085±.039 | -.013±.055 | 0.001±.074 |
| March | 744 | 0.63±0.08 | 34.10±0.03 | 0.082±.036 | -.032±.038 | 0.004±.075 |
| April | 720 | 0.51±0.08 | 34.05±0.03 | 0.094±.036 | -.027±.054 | -.000±.081 |
| May | 744 | 0.36±0.11 | 34.02±0.03 | 0.093±.039 | -.023±.050 | -.006±.084 |
| June | 720 | 0.45±0.18 | 34.04±0.05 | 0.080±.042 | -.048±.046 | 0.001±.061 |
| July | 744 | -0.22±0.40 | 33.94±0.06 | 0.106±.041 | -.084±.034 | 0.010±.068 |
| August | 476 | -0.24±0.32 | 33.93±0.06 | 0.087±.044 | -.064±.045 | -.006±.057 |



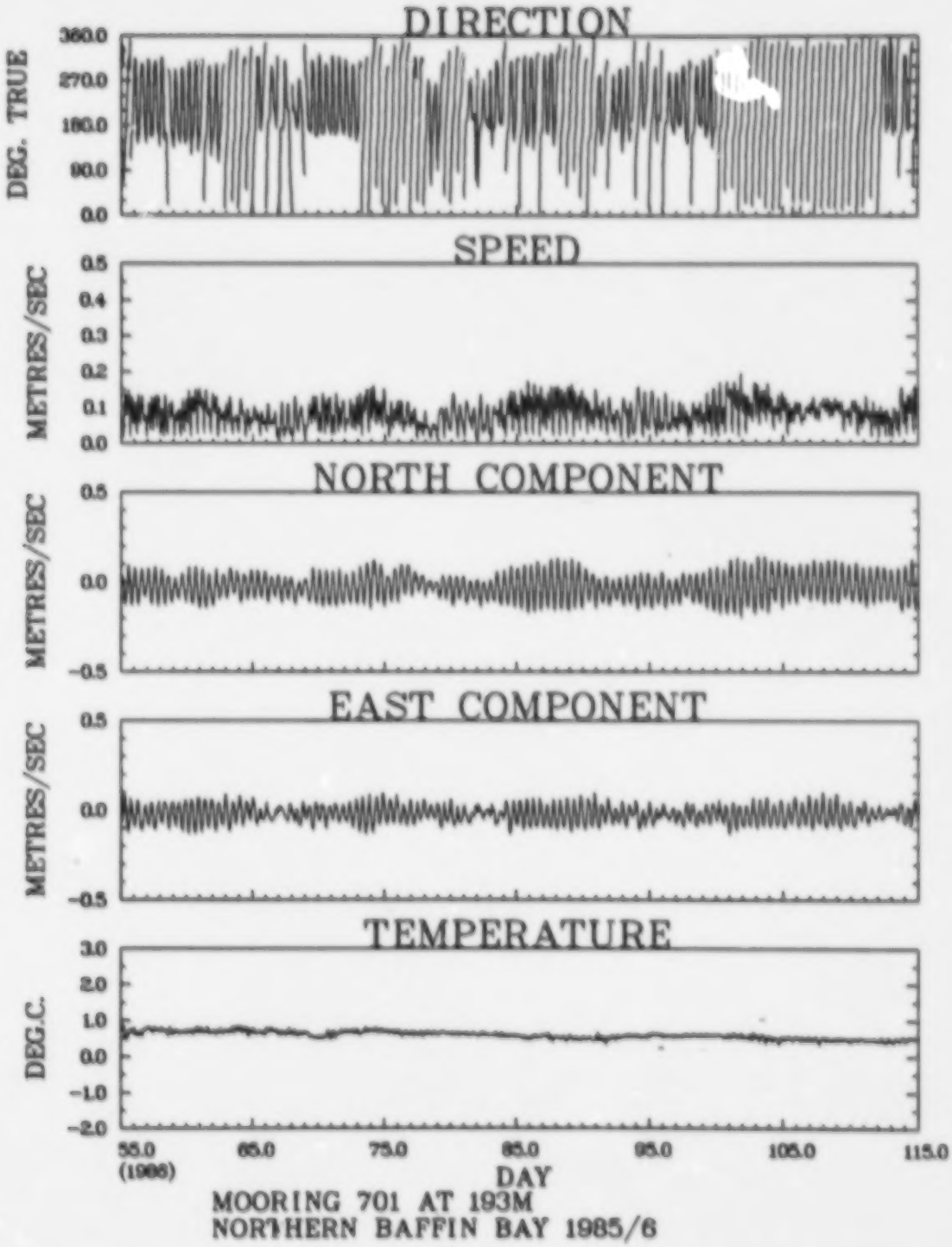

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



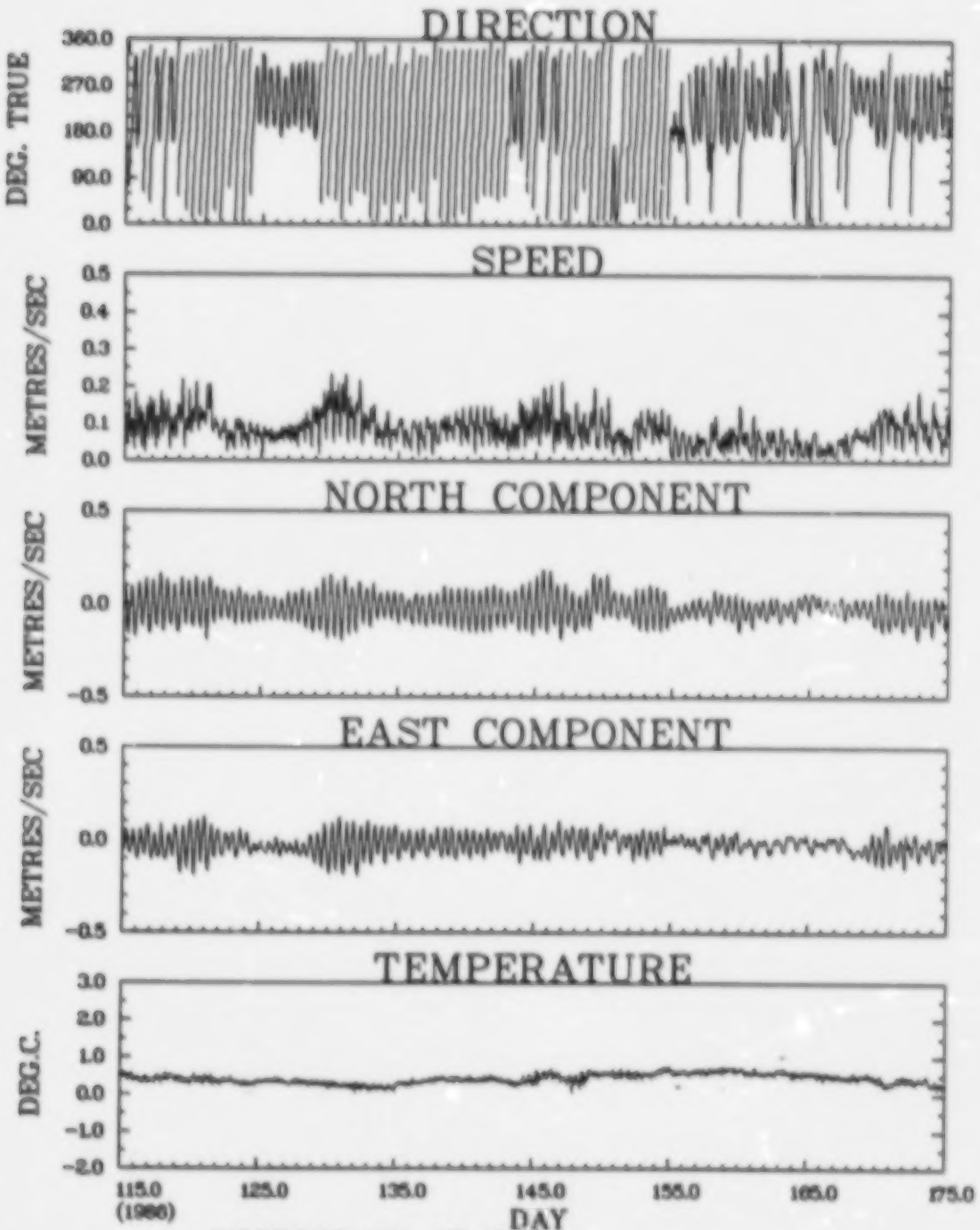

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



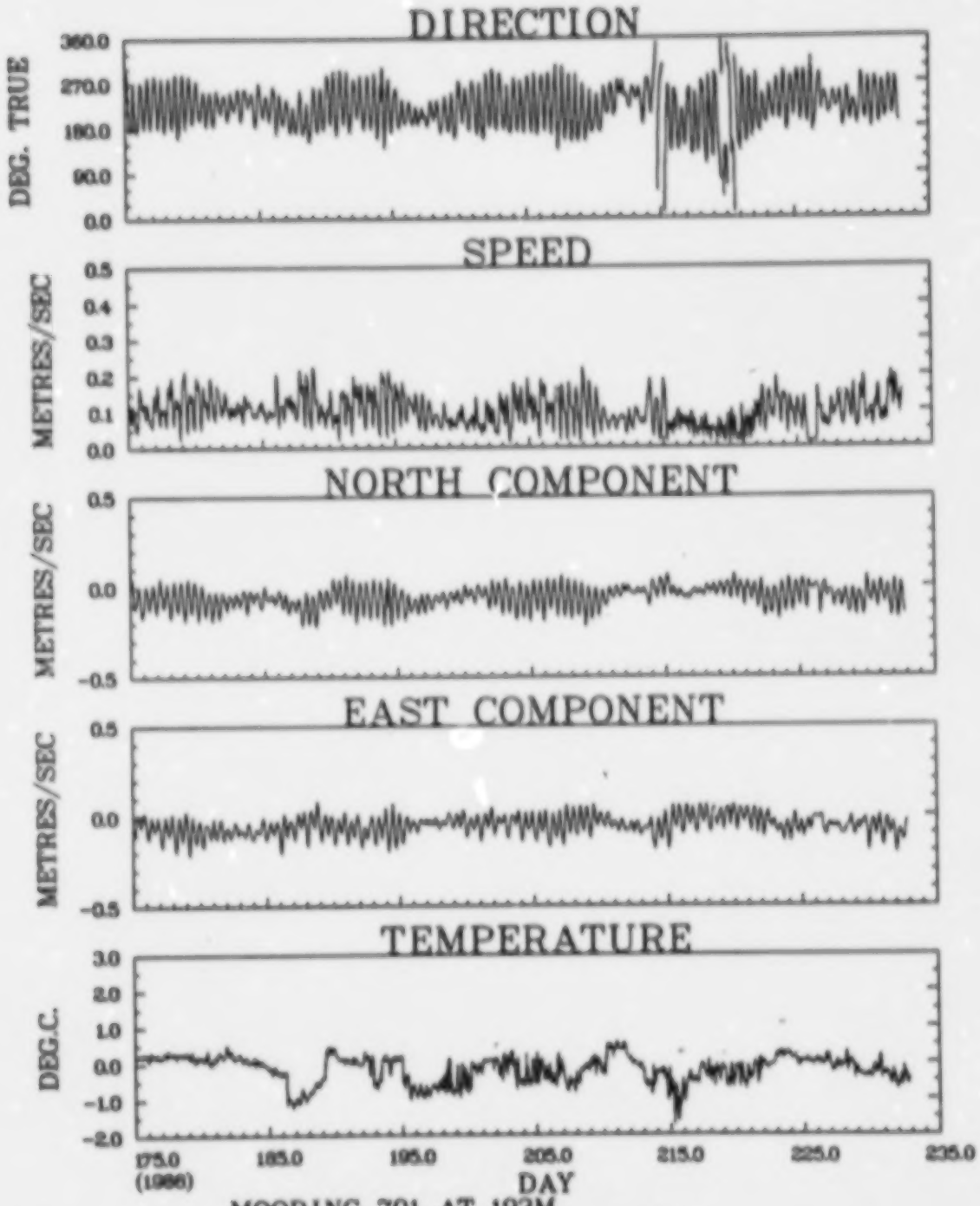

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



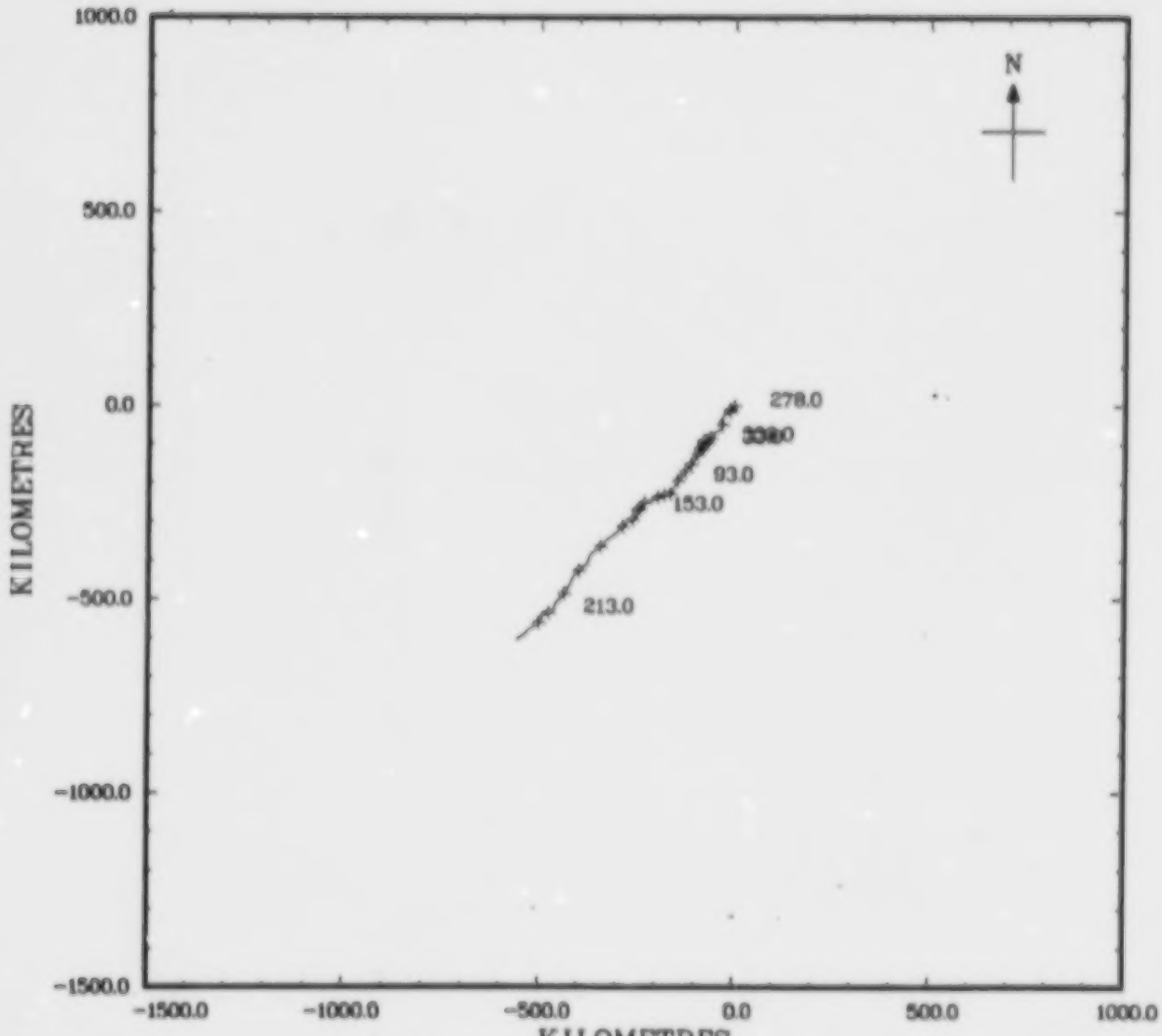

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



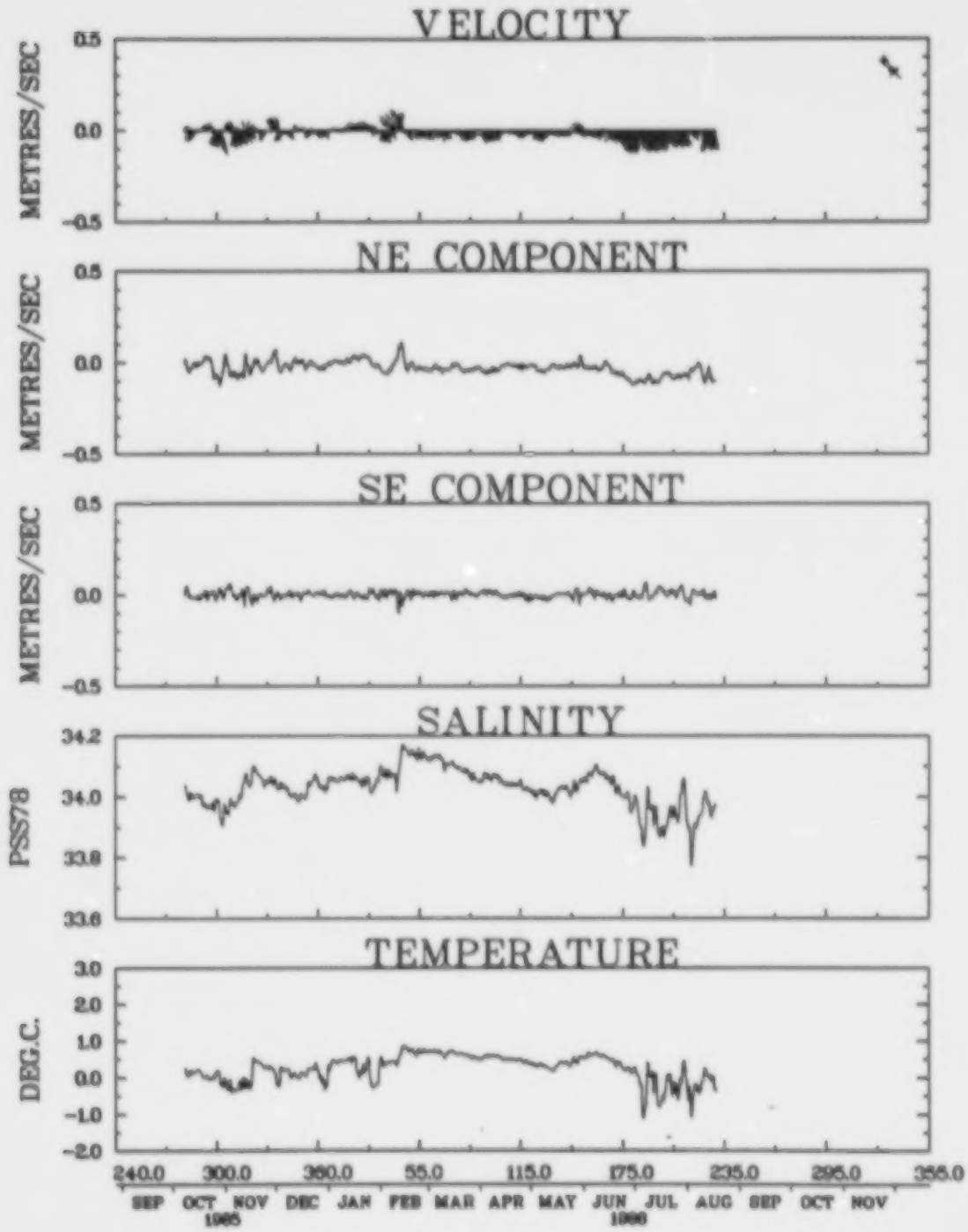

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



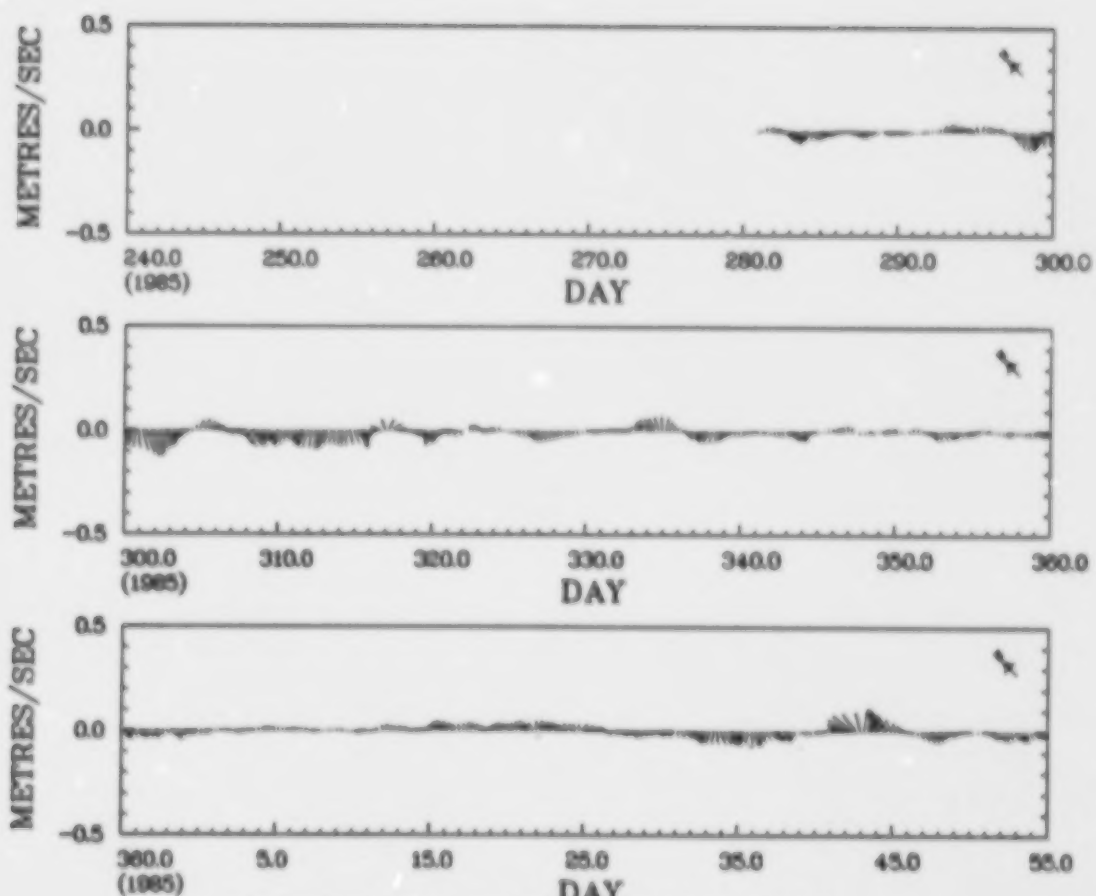

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6



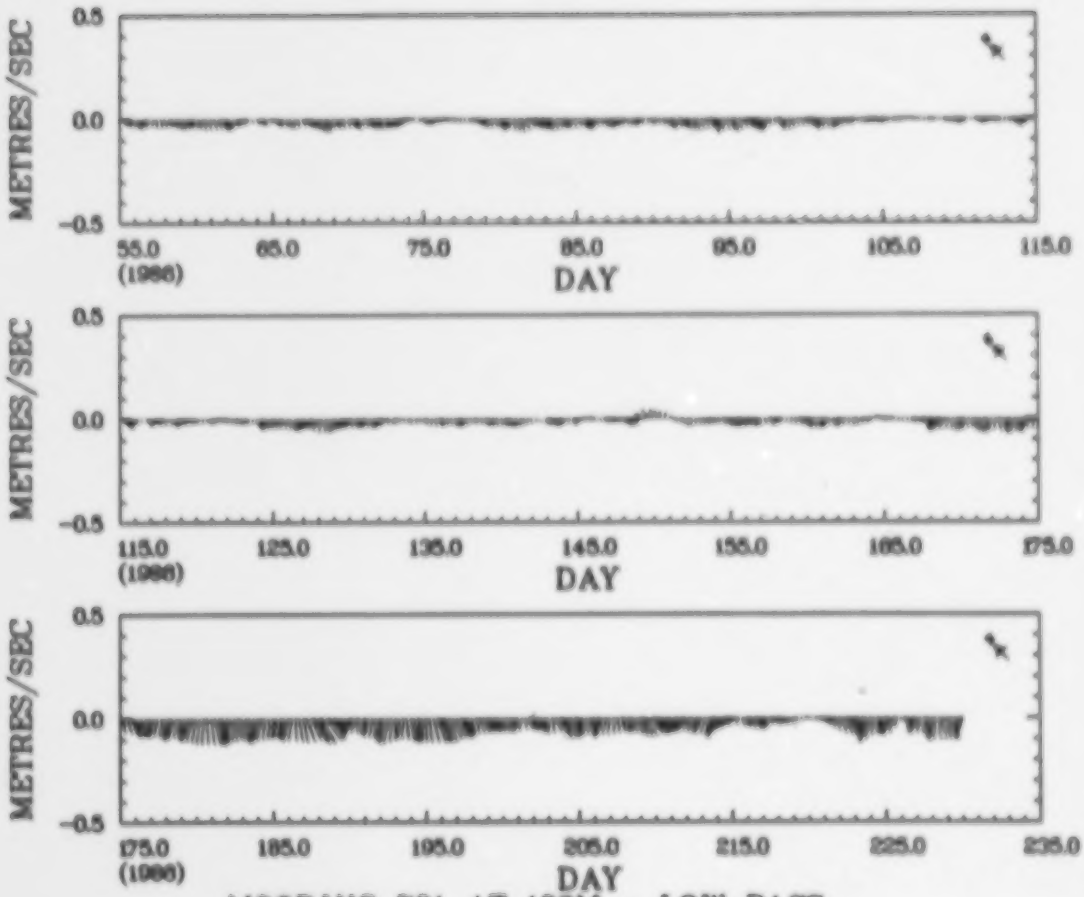

MOORING 701 AT 193M
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 193M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 193M - LOW PASS
NORTHERN BAFFIN DAY 1985/6



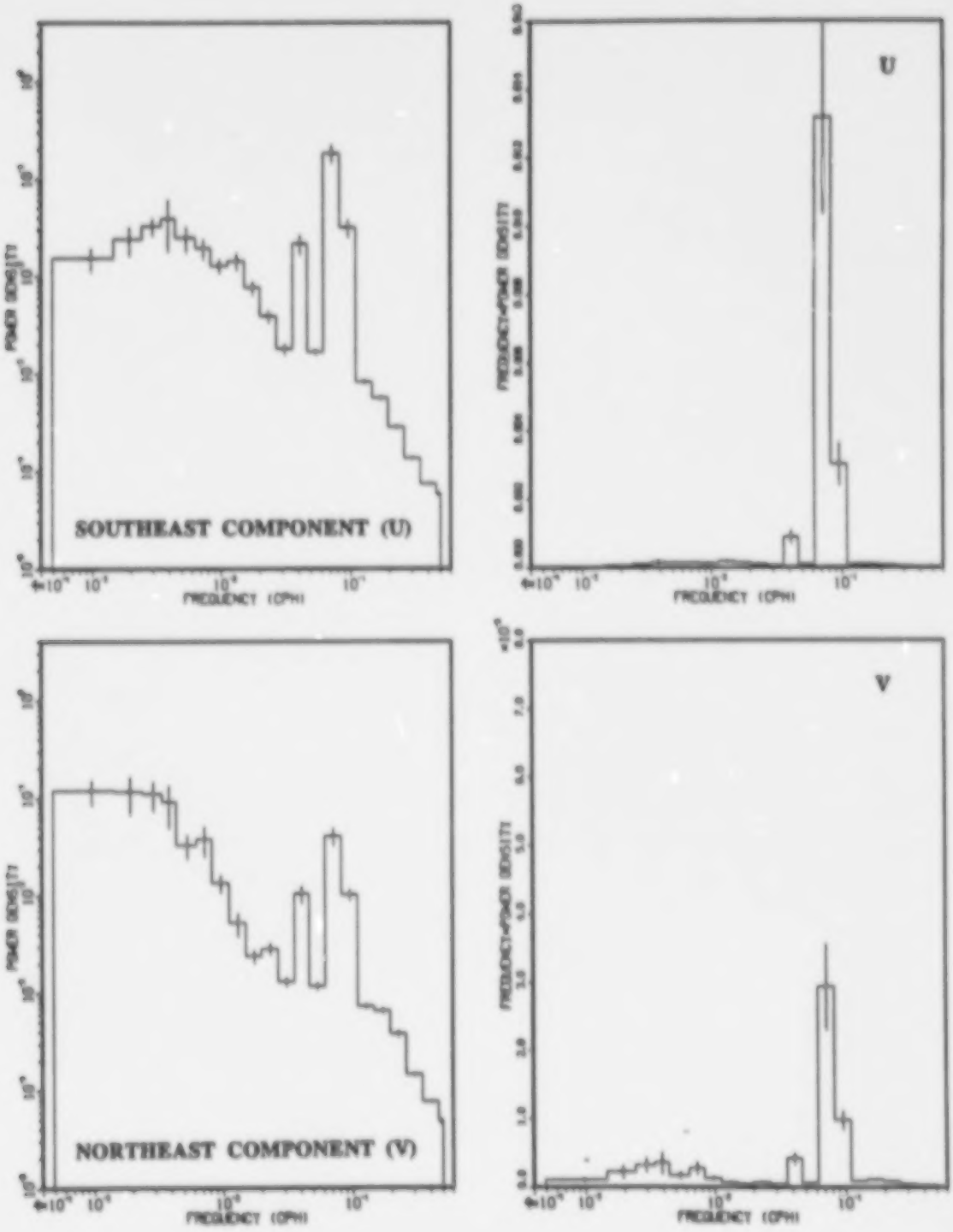

MOORING 701 AT 193M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 701**
**Depth 193 m**

**Tidal Analysis**

320.2 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .018 | .006 | 108 | 64 | C | .008 | 290 | .017 | 58 |
| O1 | .009 | .005 | 101 | 11 | C | .006 | 262 | .009 | 5 |
| P1 | .006 | .002 | 107 | 60 | C | .003 | 291 | .005 | 53 |
| M2 | .087 | .021 | 331 | 22 | C | .077 | 30 | .047 | 179 |
| S2 | .031 | .003 | 126 | 269 | C | .019 | 97 | .025 | 265 |
| N2 | .016 | .003 | 322 | 1 | C | .013 | 11 | .010 | 166 |
| K2 | .011 | .003 | 317 | 71 | C | .008 | 84 | .008 | 236 |
| MF | .004 | .000 | 58 | 207 | A | .002 | 208 | .004 | 207 |
| M4 | .001 | .000 | 69 | 247 | C | .001 | 195 | .001 | 257 |
| MS4 | .001 | .001 | 57 | 53 | C | .001 | 8 | .001 | 76 |




MOORING 701 AT 193M - LOW PASS
NORTHERN BAFFIN BAY 1985 6

**Mooring 701**
**Depth 343 m**

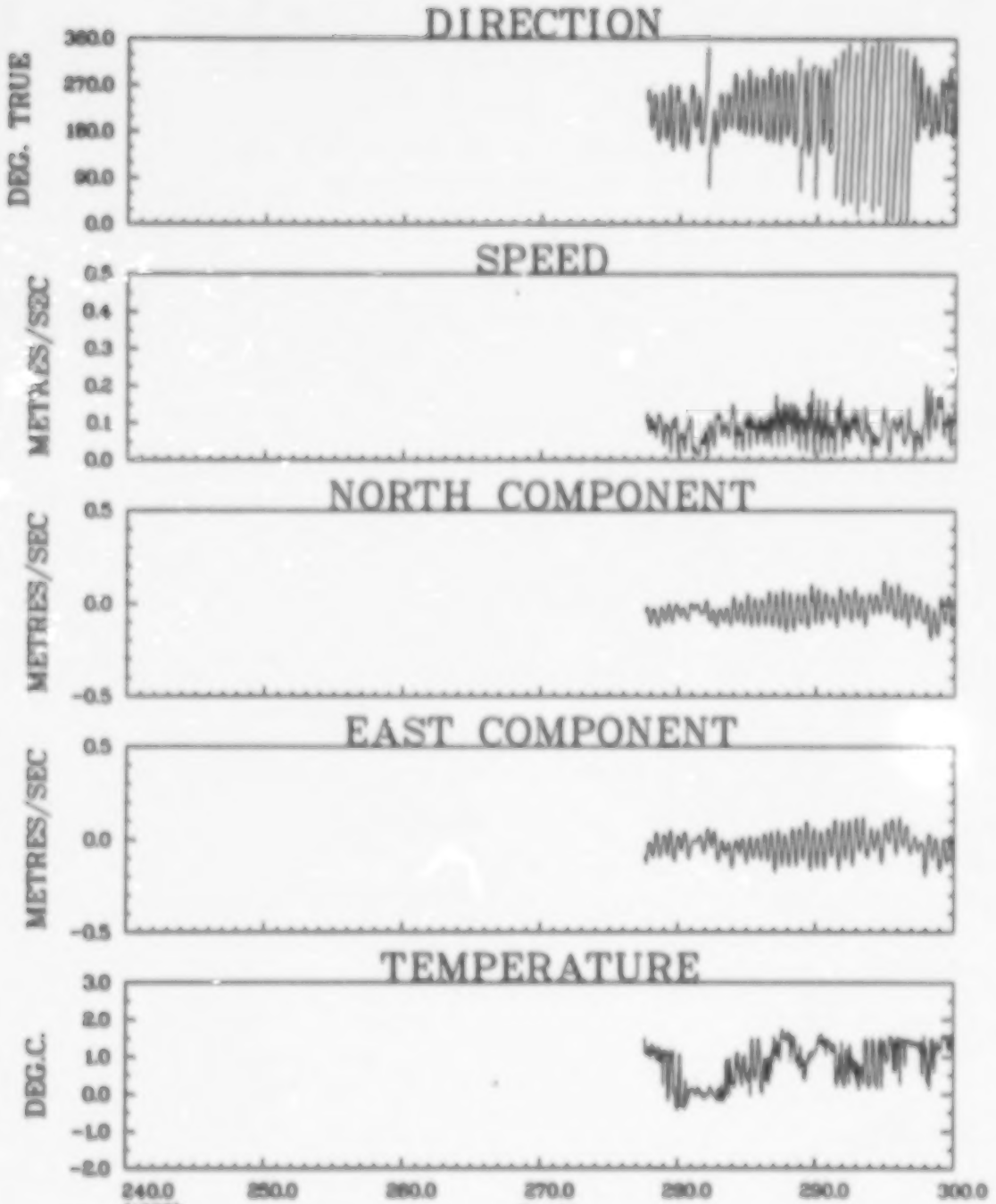
| | | | |
|---|---|---|---|
| Latitude | 75° 20.4N | Deployment | 1353Z 4 Oct., 1985 |
| Longitude | 74° 21.8W | Recovery | 1949Z 20 Aug., 1986 |
| Water Depth | 533 m | Duration | 320 d |

**RECORD LENGTH STATISTICS**

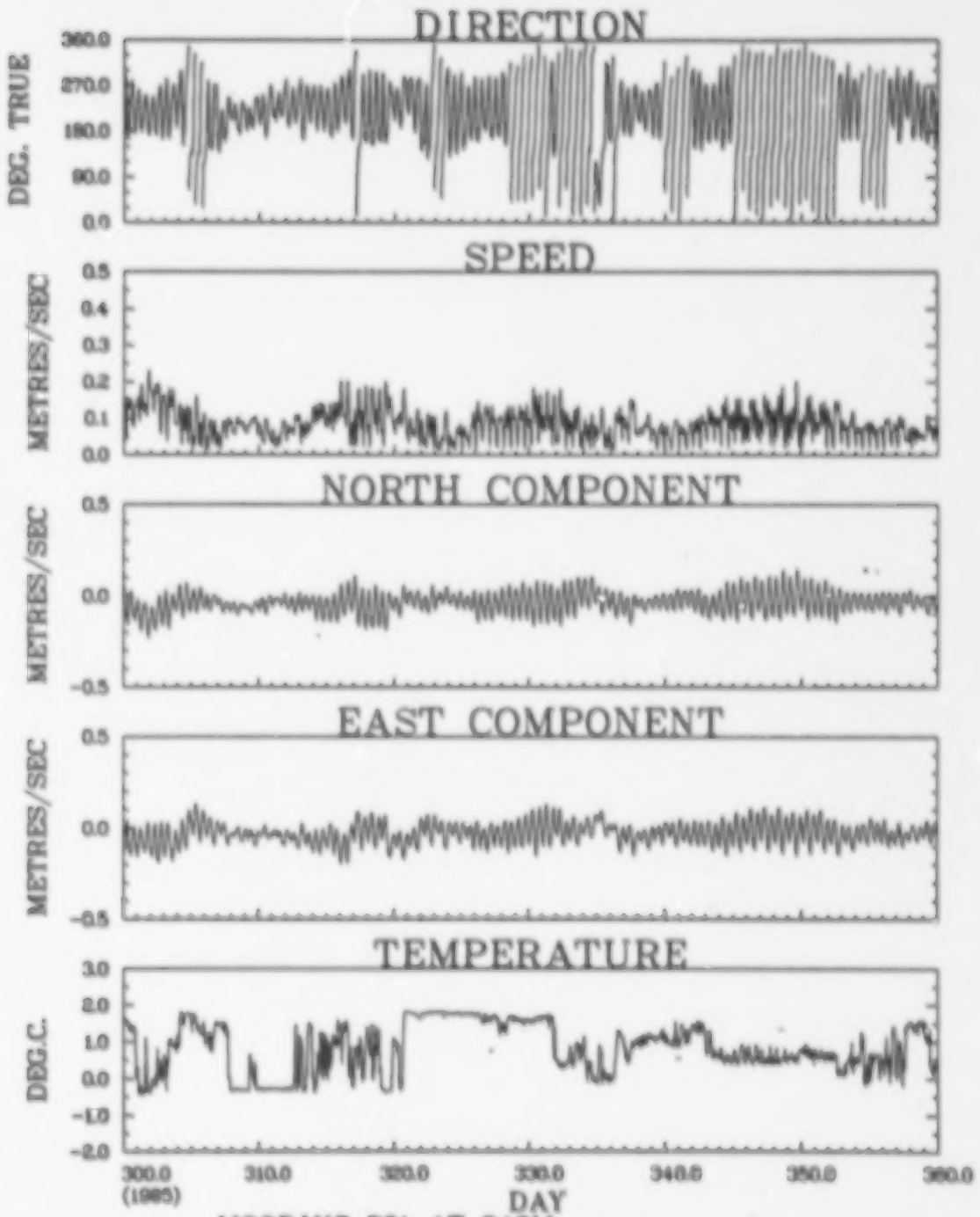
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7685 | 350 | 354 | 352 | 0.7 |
| Temperature (T) | °C | 7685 | -0.42 | 1.94 | 1.03 | 0.63 |
| Salinity (S) | PSS78 | 7668 | 34.02 | 34.47 | 34.29 | 0.07 |
| Speed (R) | $m.s^{-1}$ | 7685 | 0.015 | 0.248 | 0.089 | 0.041 |
| Northeast Component (V) | $m.s^{-1}$ | 7685 | -.193 | 0.108 | -.049 | 0.043 |
| Southeast Component (U) | $m.s^{-1}$ | 7685 | -.242 | 0.209 | 0.004 | 0.072 |

**MONTHLY MEANS**

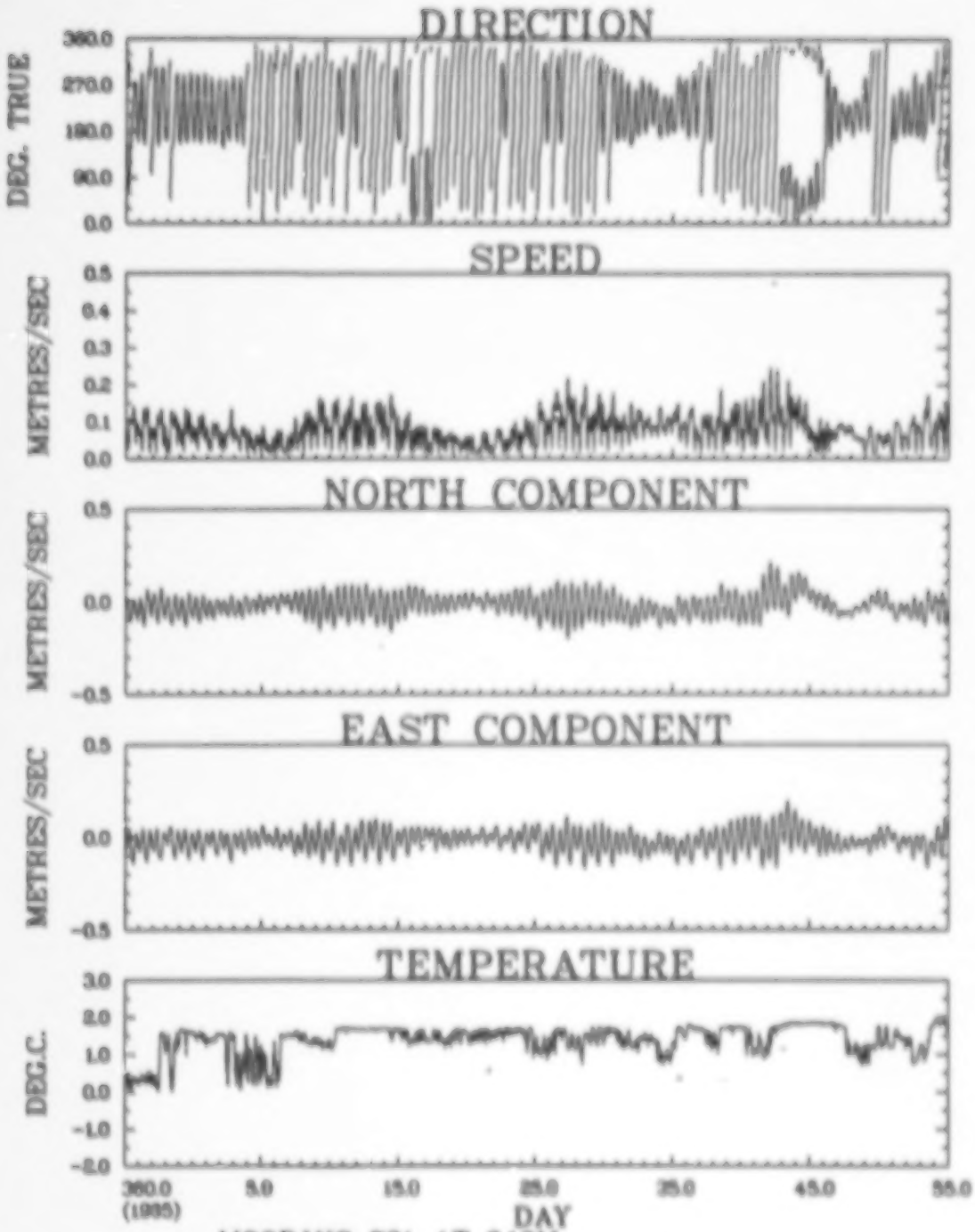
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 657 | 0.81±0.60 | 34.30±0.06 | 0.096±.040 | -.053±.050 | 0.004±.075 |
| November | 720 | 0.91±0.79 | 34.32±0.08 | 0.084±.039 | -.045±.038 | 0.006±.071 |
| December | 744 | 0.77±0.46 | 34.29±0.05 | 0.079±.035 | -.035±.035 | 0.002±.071 |
| January | 744 | 1.39±0.34 | 34.34±0.04 | 0.072±.041 | -.021±.033 | 0.001±.074 |
| February | 672 | 1.49±0.33 | 34.35±0.04 | 0.089±.041 | -.030±.048 | 0.001±.080 |
| March | 744 | 1.62±0.29 | 34.35±0.04 | 0.092±.043 | -.050±.035 | 0.004±.081 |
| April | 720 | 0.93±0.52 | 34.27±0.06 | 0.089±.041 | -.053±.034 | 0.002±.075 |
| May | 744 | 0.98±0.54 | 34.27±0.06 | 0.080±.042 | -.032±.039 | -.001±.075 |
| June | 720 | 1.11±0.44 | 34.28±0.05 | 0.084±.037 | -.052±.039 | 0.007±.065 |
| July | 744 | 0.57±0.70 | 34.21±0.07 | 0.107±.032 | -.091±.029 | 0.010±.057 |
| August | 476 | 0.64±0.66 | 34.22±0.06 | 0.109±.039 | -.087±.038 | 0.004±.067 |



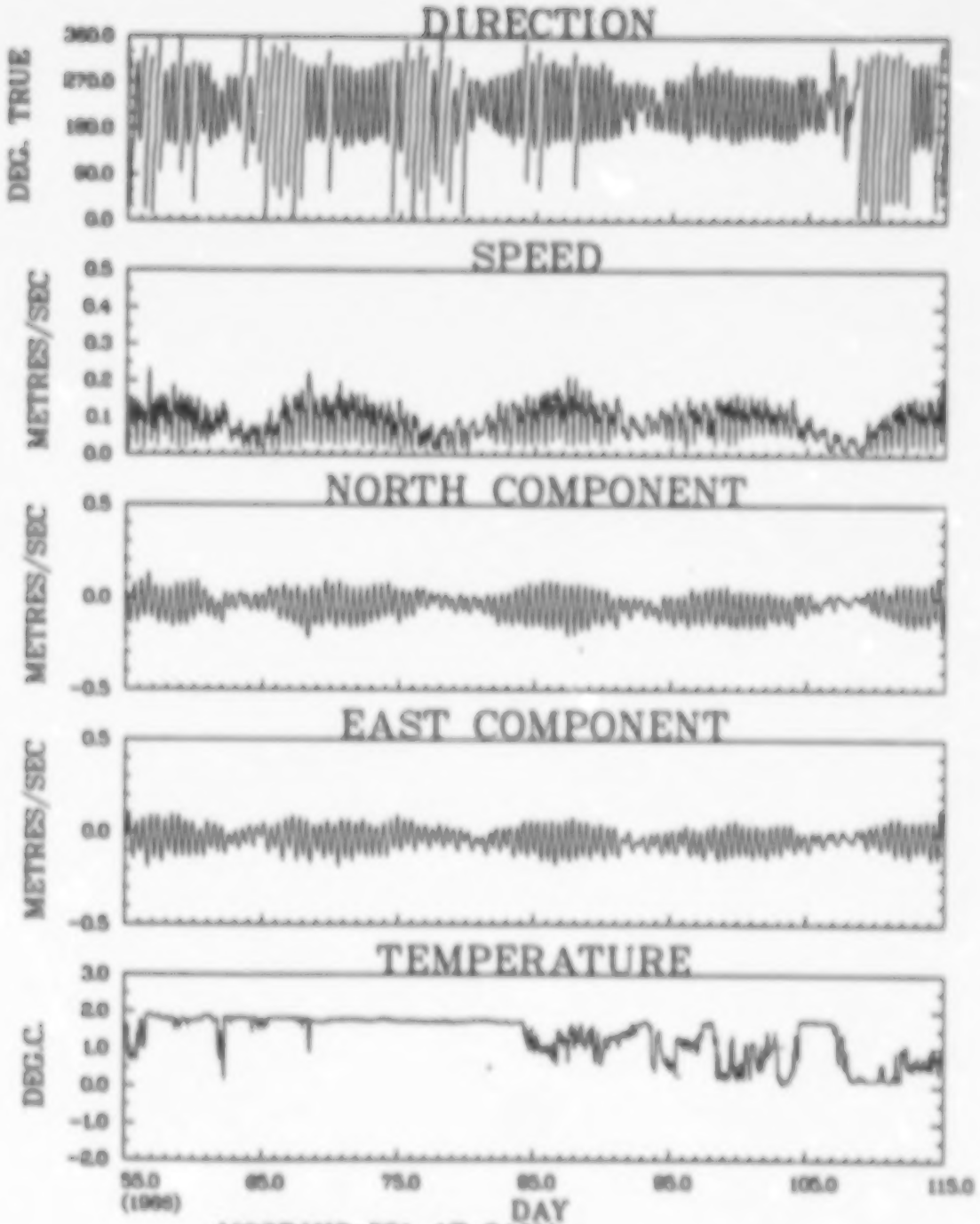

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



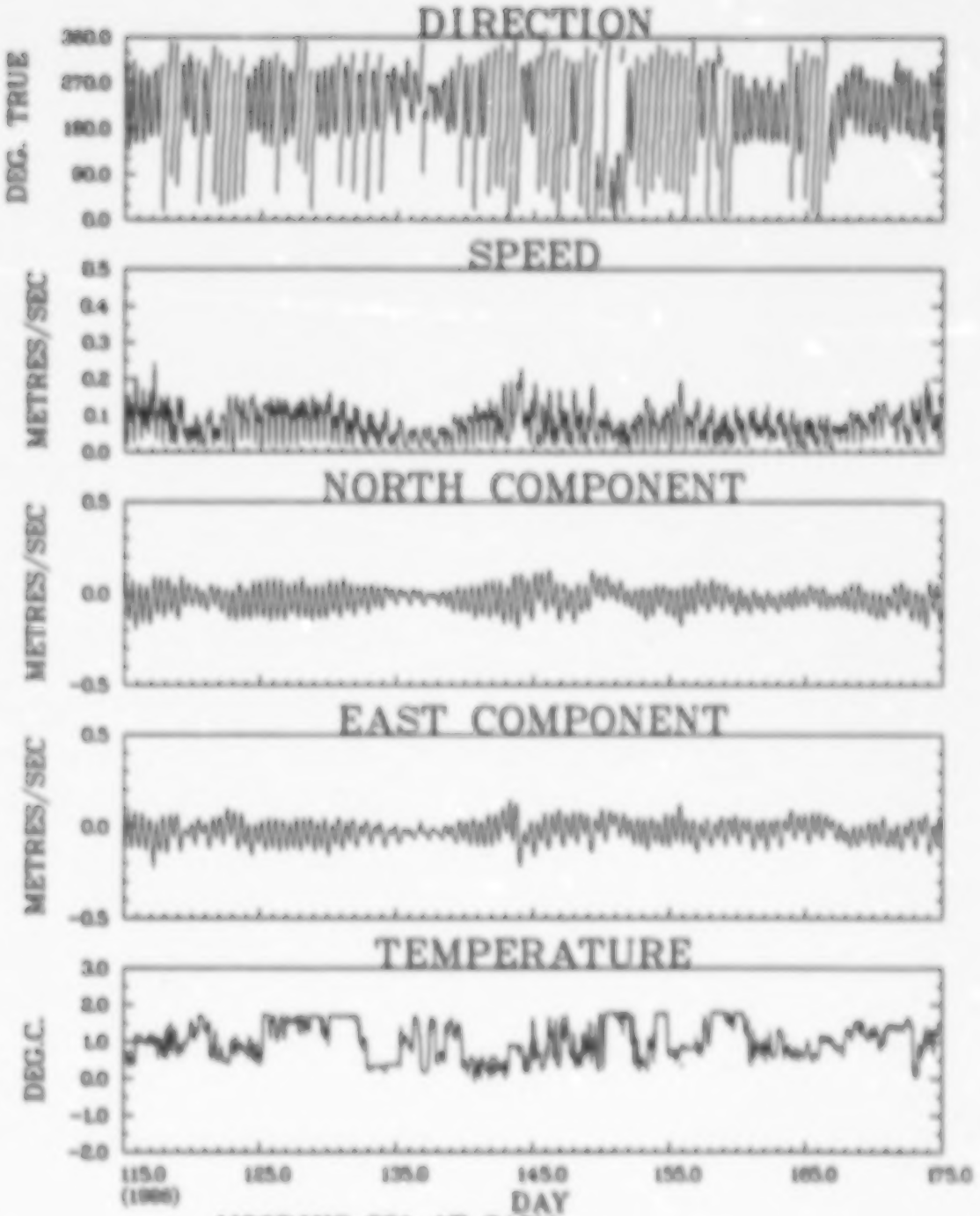

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



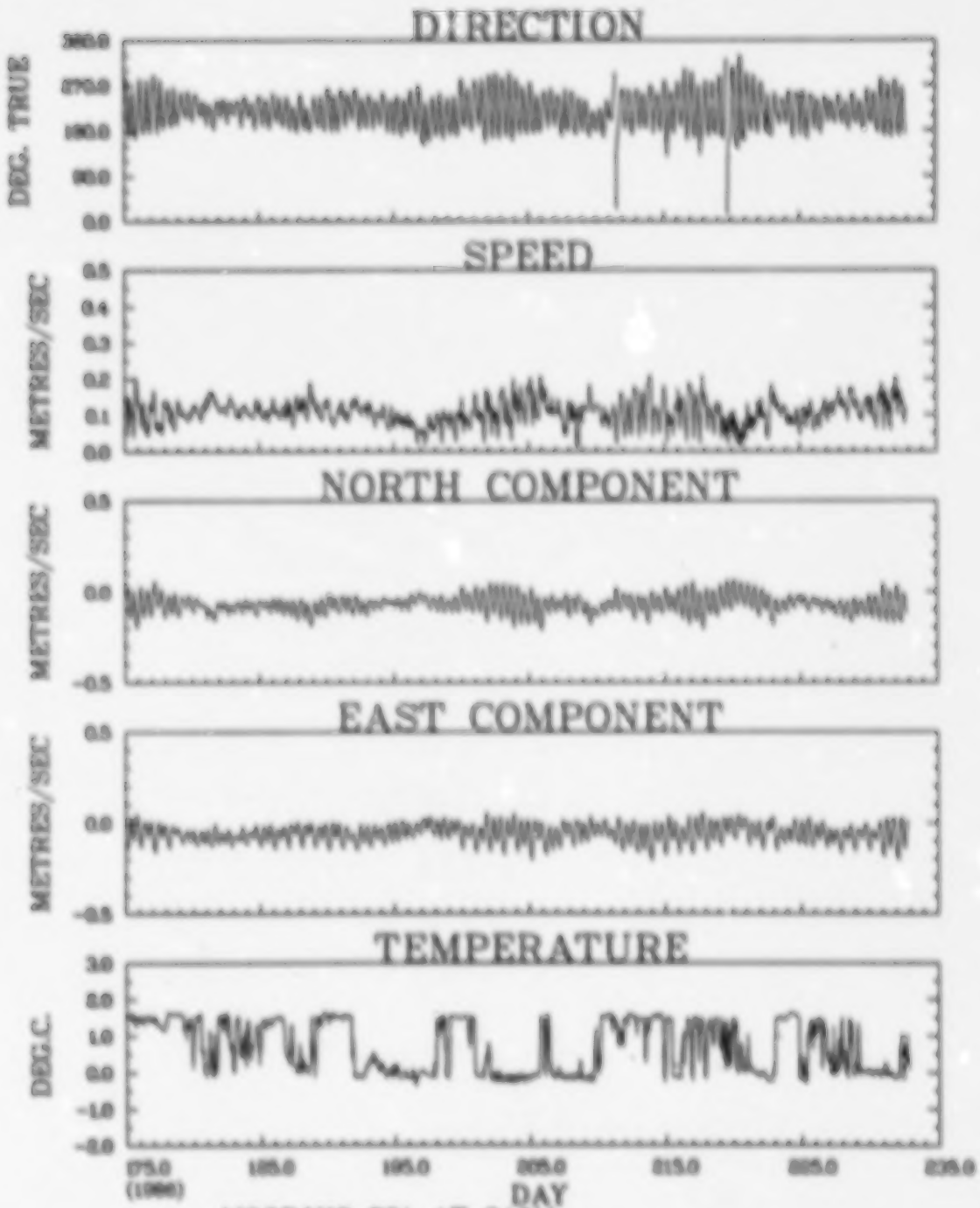

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



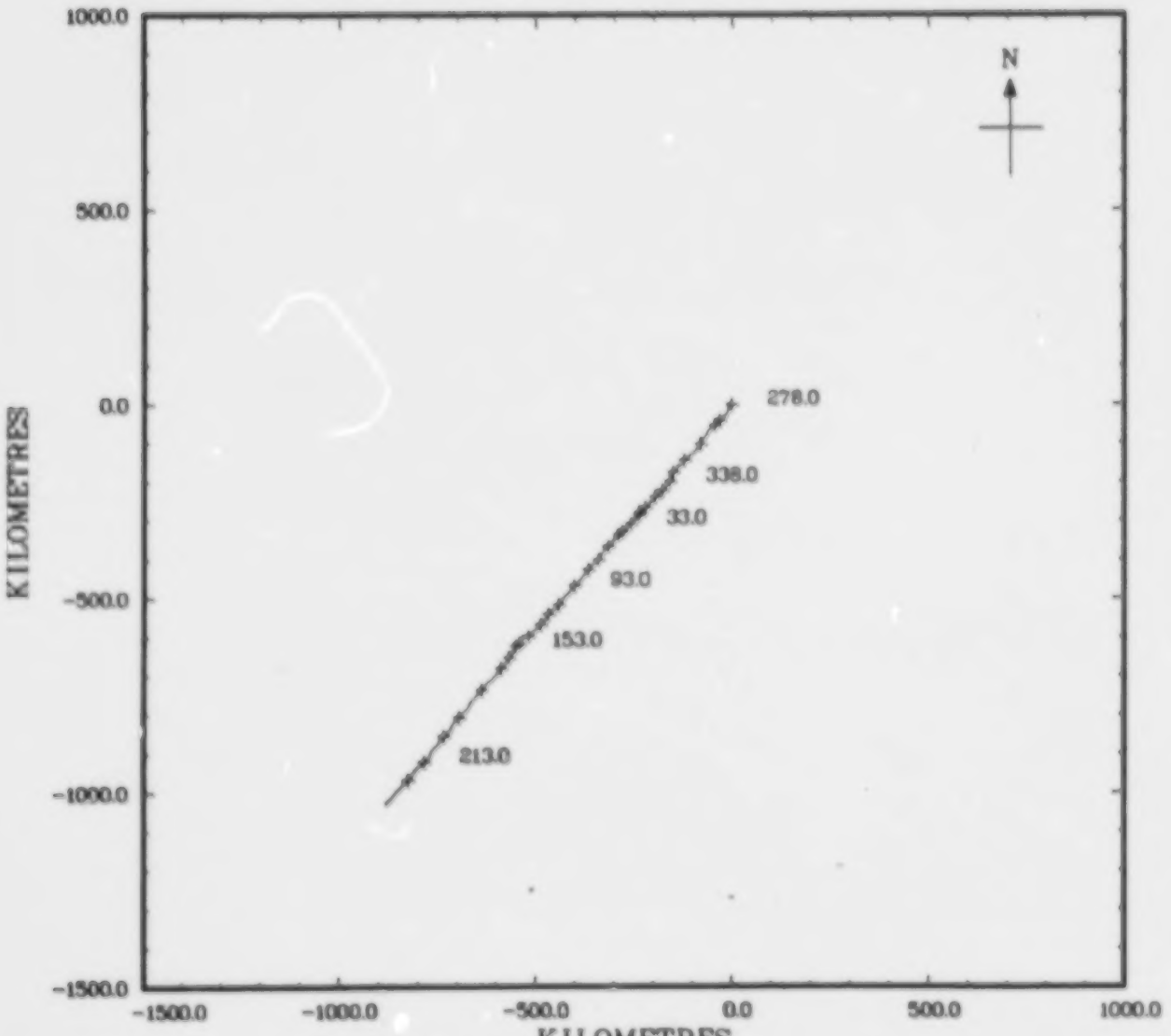

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



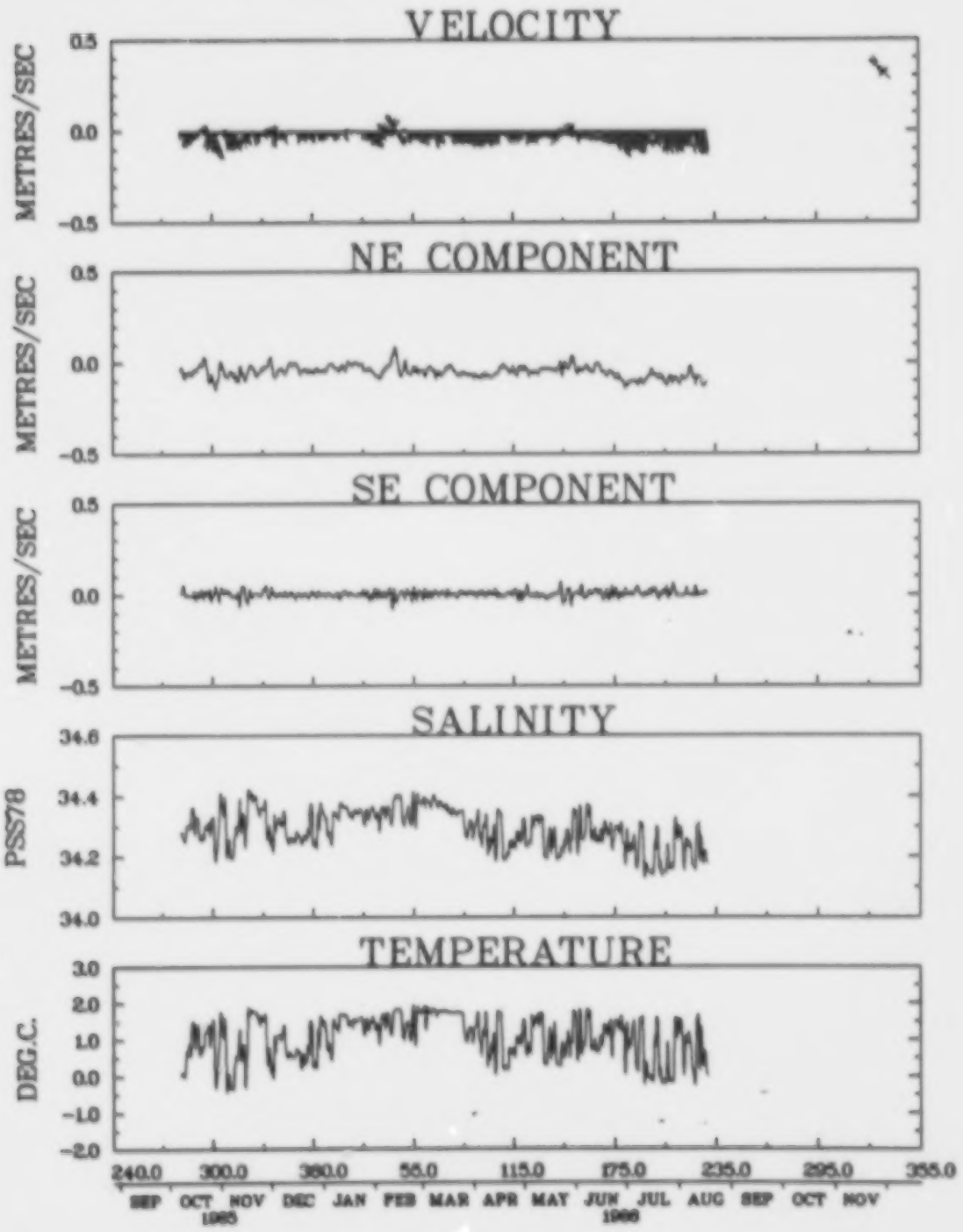

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



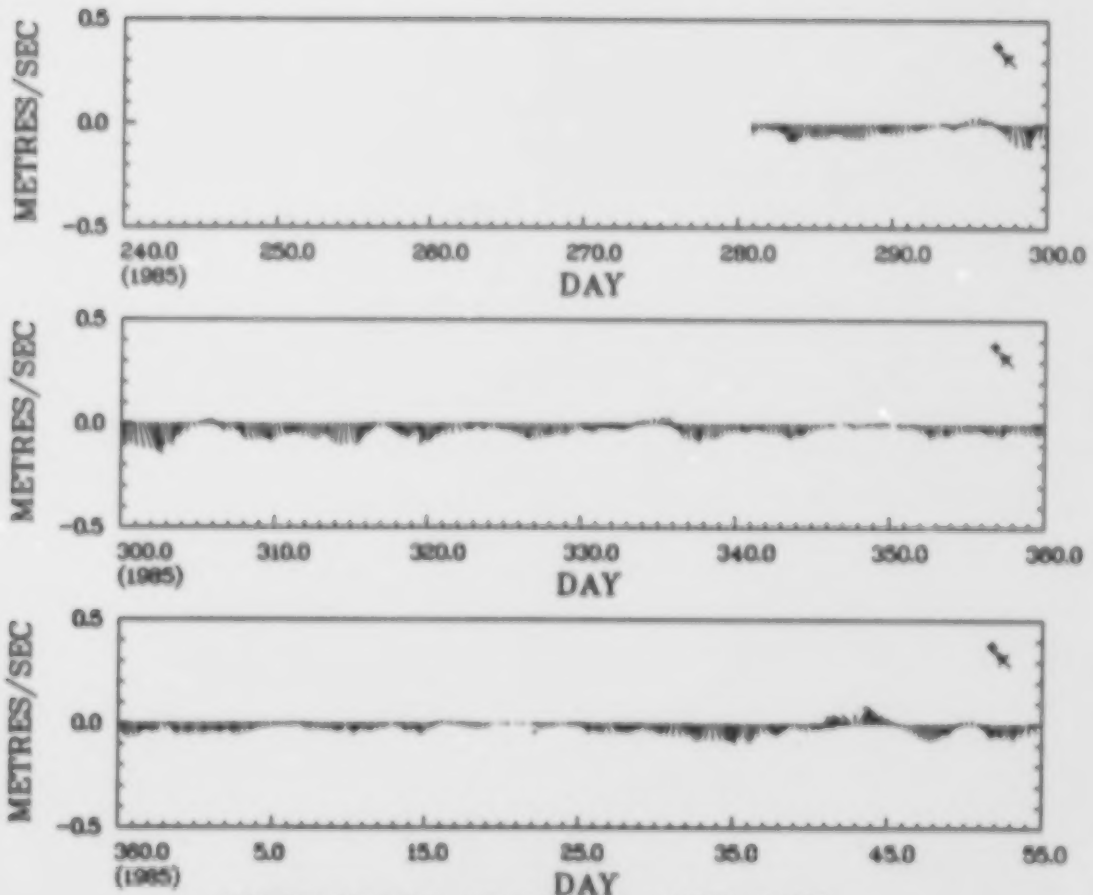

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6



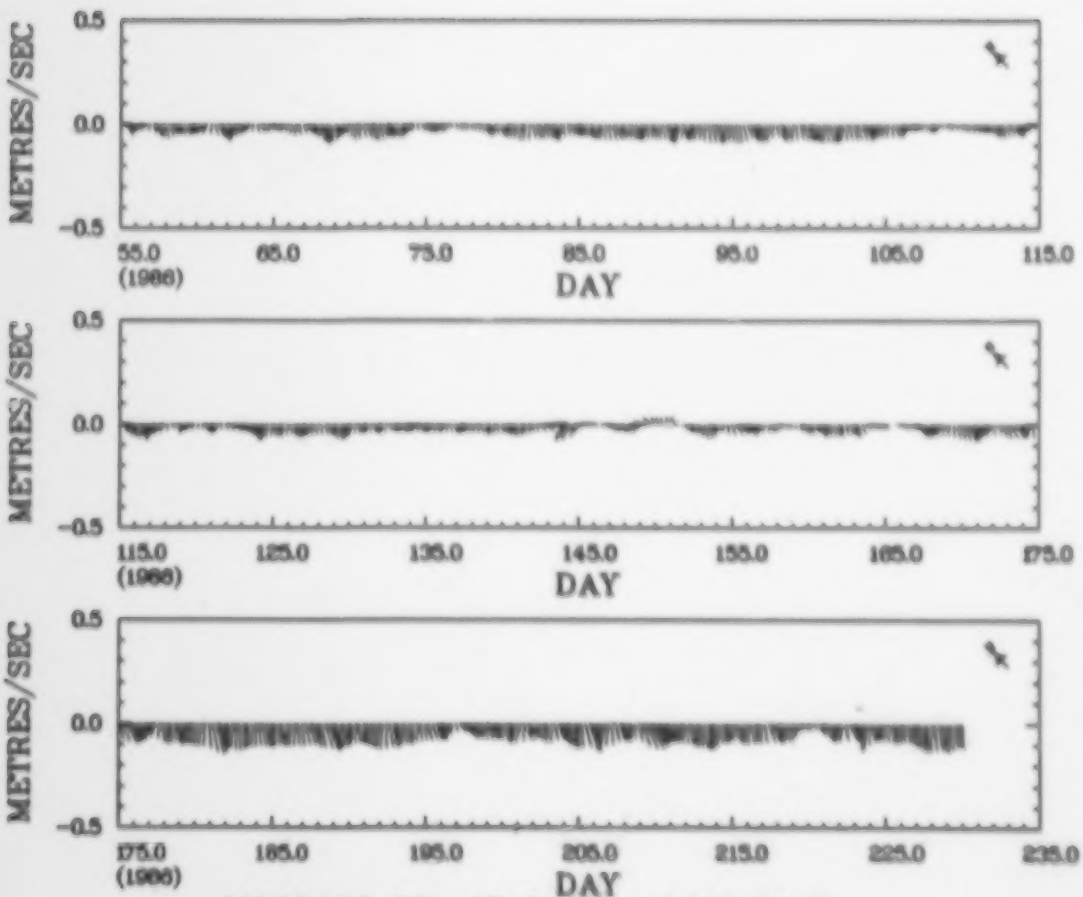

MOORING 701 AT 343M
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 343M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 343M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



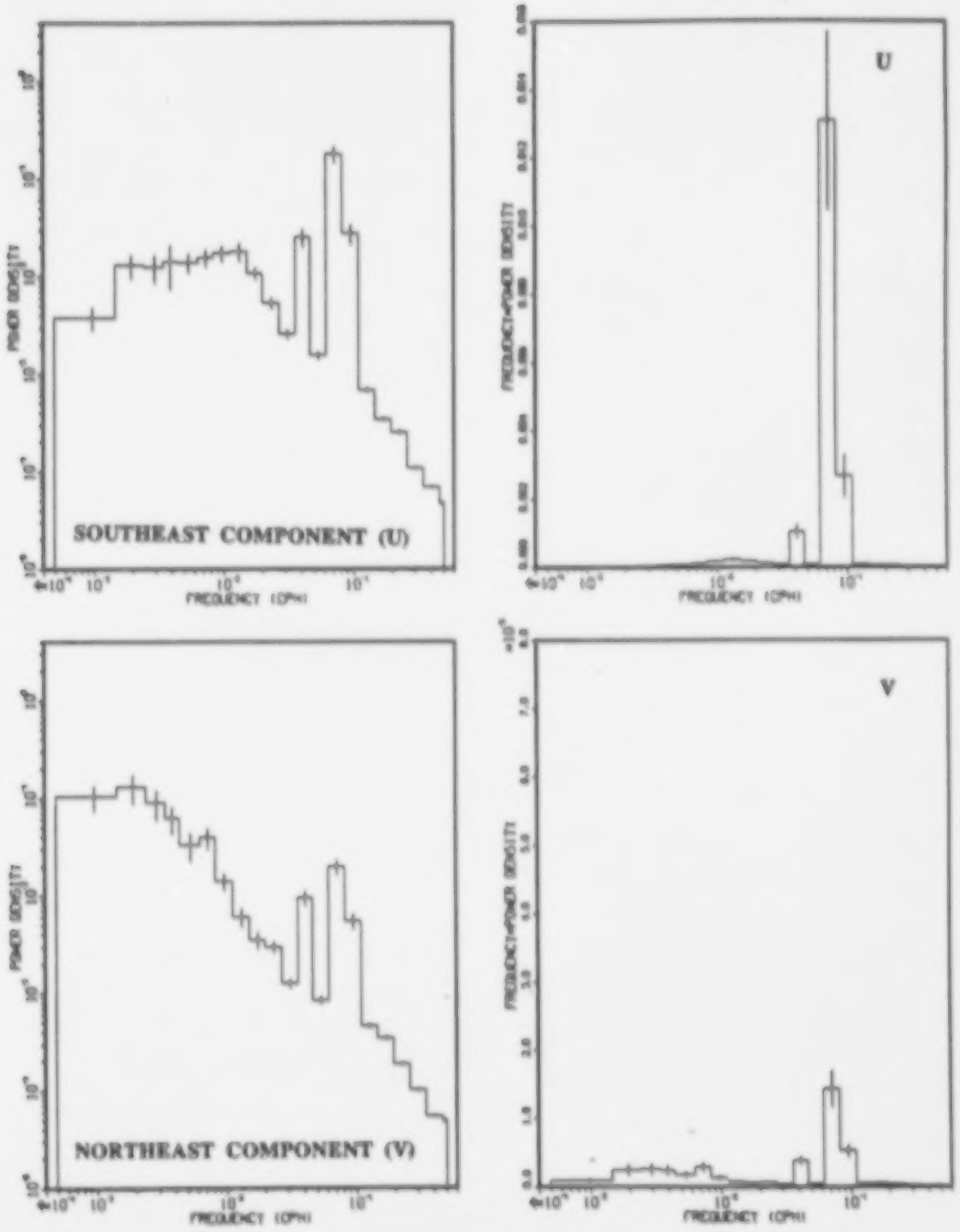

MOORING 701 AT 343M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 701**
**Depth 343 m**

**Tidal Analysis**

320.2 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .018 | .006 | 114 | 66 | C | .009 | 285 | .017 | 57 |
| O1 | .010 | .006 | 109 | 9 | C | .006 | 248 | .010 | 358 |
| P1 | .006 | .002 | 107 | 54 | C | .003 | 283 | .006 | 48 |
| M2 | .087 | .024 | 315 | 43 | C | .064 | 59 | .064 | 208 |
| S2 | .034 | .006 | 329 | 72 | C | .029 | 78 | .018 | 236 |
| N2 | .018 | .006 | 324 | 6 | C | .015 | 18 | .012 | 162 |
| K2 | .010 | .001 | 323 | 73 | C | .008 | 79 | .006 | 242 |
| MF | .004 | .000 | 41 | 232 | A | .003 | 237 | .002 | 226 |
| M4 | .001 | .000 | 31 | 219 | A | .001 | 230 | .001 | 190 |
| MS4 | .001 | .000 | 53 | 207 | C | .001 | 204 | .001 | 209 |




MOORING 701 AT 343M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 701**
**Depth 493 m**

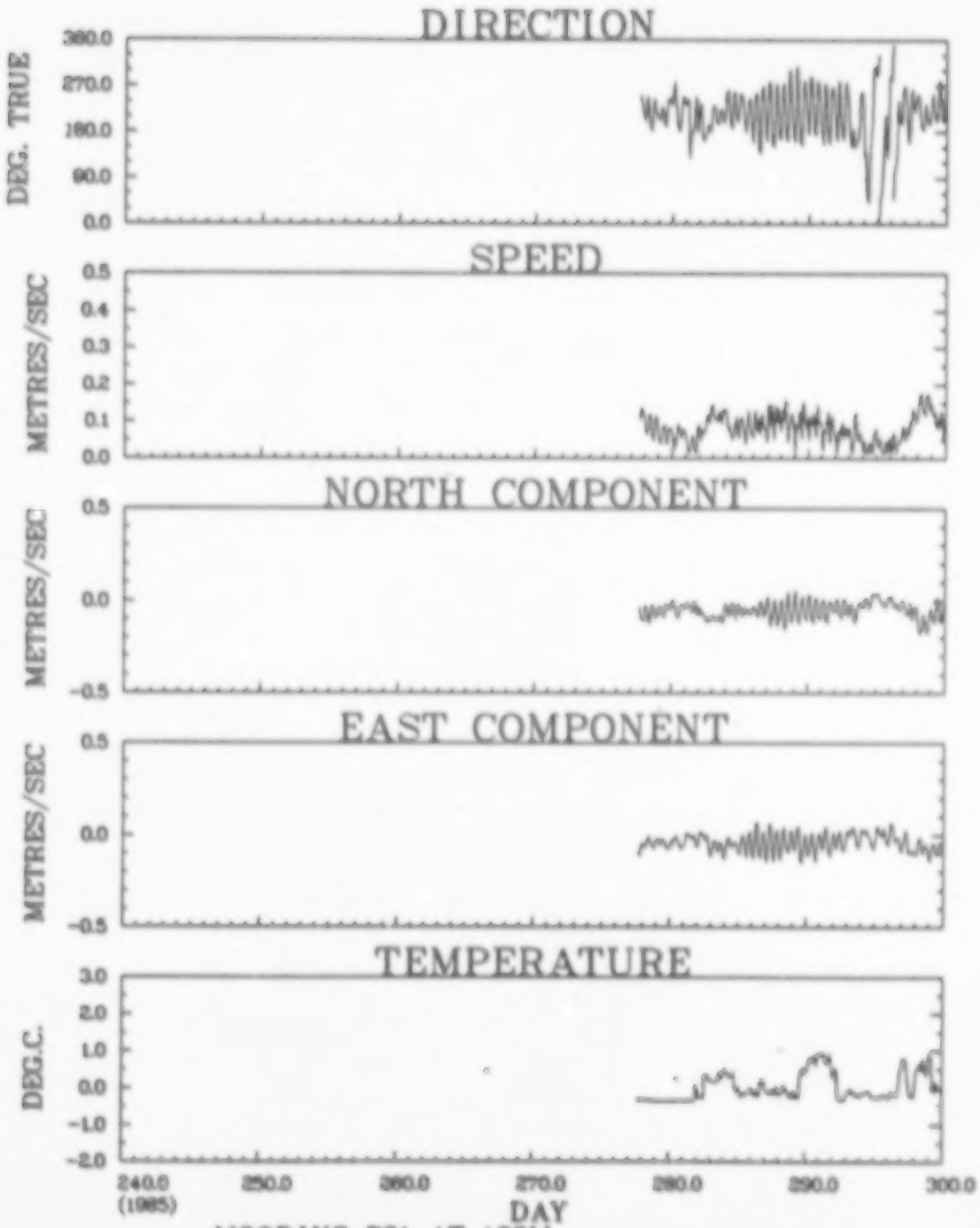
| | | | |
|---|---|---|---|
| Latitude | 75° 20.4N | Deployment | 1353Z 4 Oct., 1985 |
| Longitude | 74° 21.8W | Recovery | 1949Z 20 Aug., 1986 |
| Water Depth | 533 m | Duration | 320 d |

**RECORD LENGTH STATISTICS**

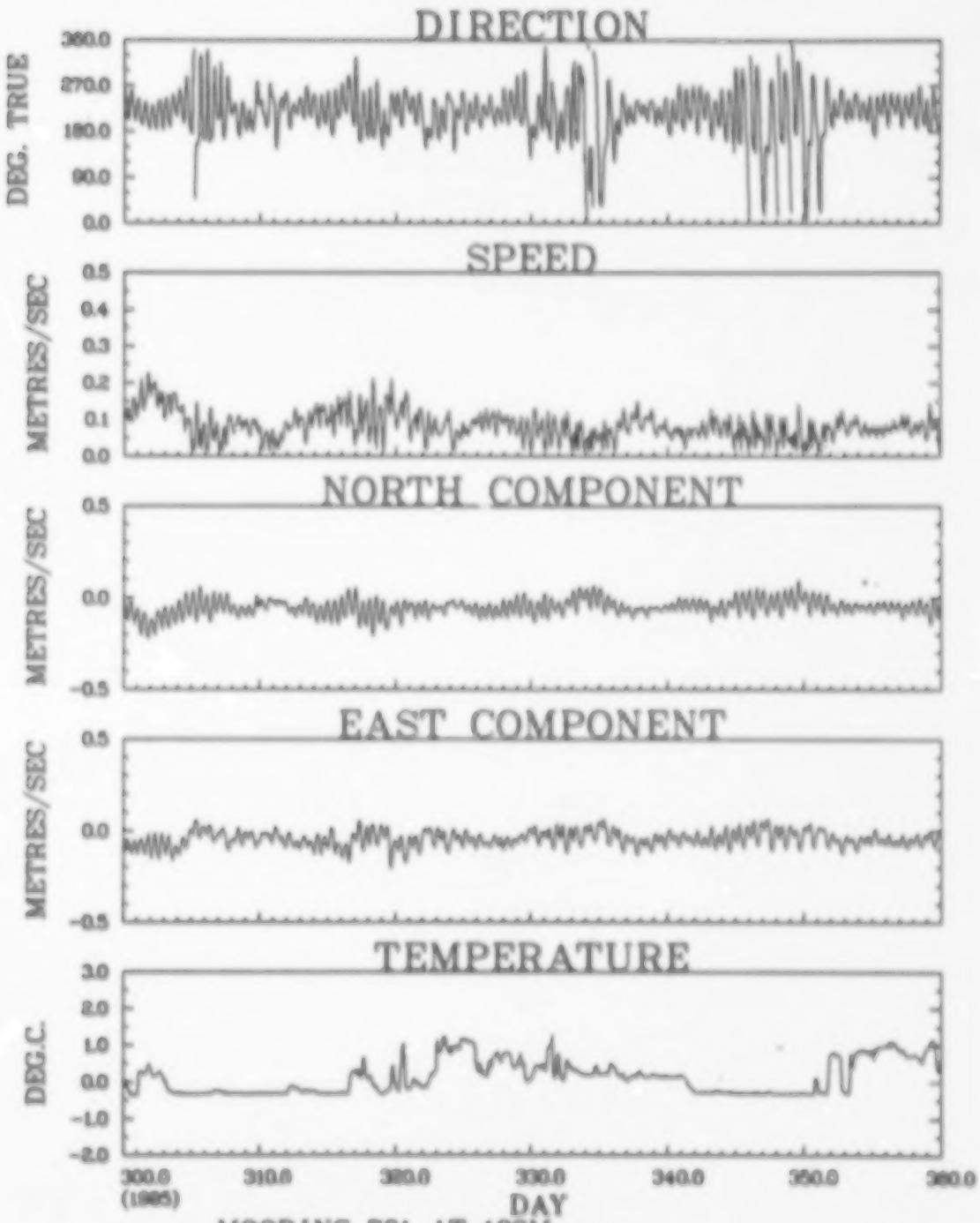
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7685 | 519 | 521 | 519 | 0.1 |
| Temperature (T) | °C | 7685 | -0.38 | 1.49 | 0.45 | 0.48 |
| Salinity (S) | PSS78 | 7674 | 34.14 | 34.54 | 34.36 | 0.06 |
| Speed (R) | $m.s^{-1}$ | 7685 | 0.015 | 0.227 | 0.079 | 0.035 |
| Northeast Component (V) | $m.s^{-1}$ | 7685 | -.206 | 0.138 | -.062 | 0.039 |
| Southeast Component (U) | $m.s^{-1}$ | 7685 | -.171 | 0.175 | 0.005 | 0.046 |

**MONTHLY MEANS**

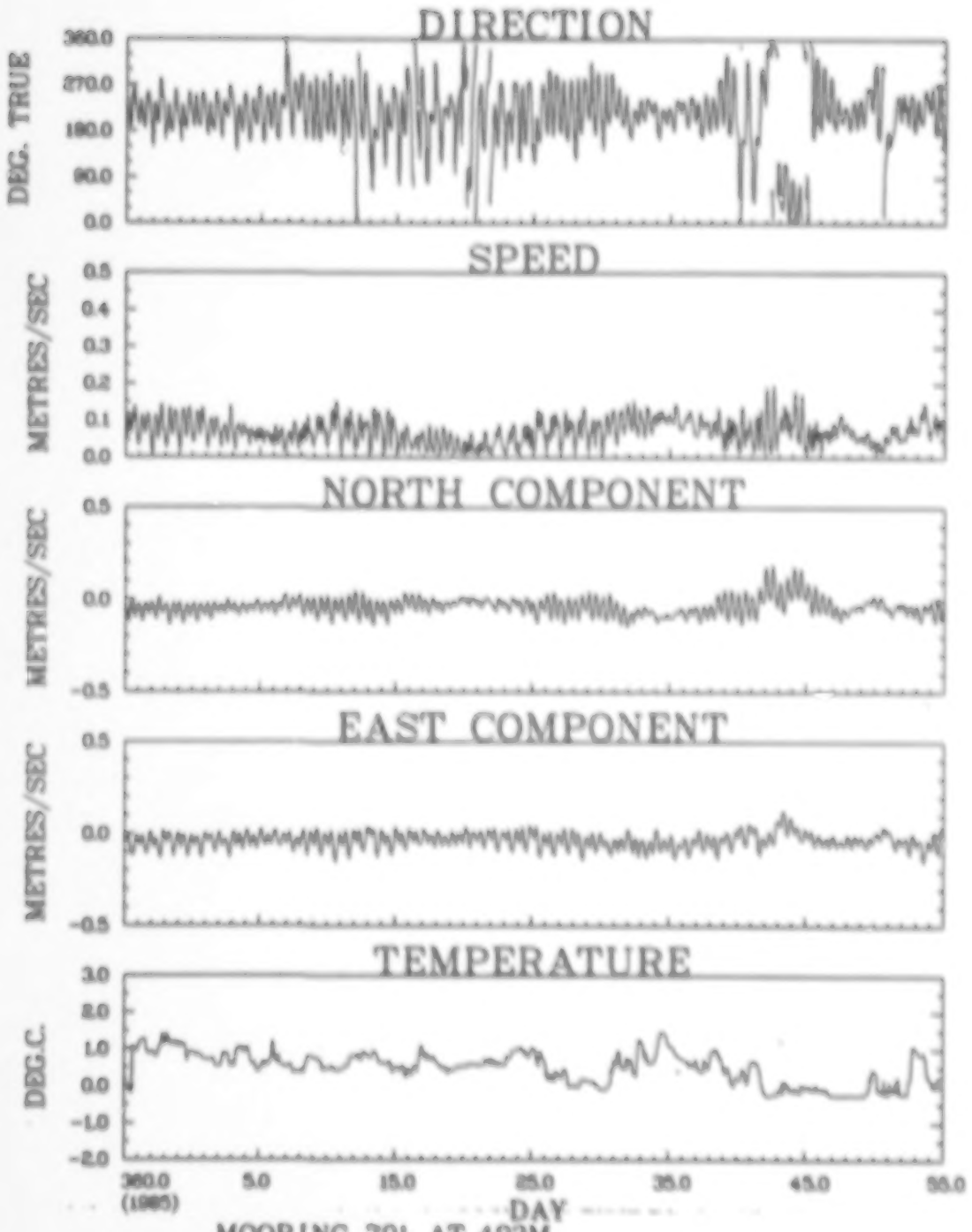
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 657 | 1.05±0.36 | 34.38±0.04 | 0.093±.042 | -.076±.046 | 0.008±.051 |
| November | 720 | 1.18±0.45 | 34.39±0.04 | 0.083±.036 | -.067±.037 | 0.007±.048 |
| December | 744 | 0.32±0.55 | 34.38±0.05 | 0.076±.028 | -.060±.035 | 0.004±.042 |
| January | 744 | 0.58±0.26 | 34.39±0.03 | 0.064±.031 | -.046±.031 | 0.002±.044 |
| February | 672 | 0.37±0.47 | 34.37±0.05 | 0.081±.034 | -.048±.052 | 0.002±.052 |
| March | 744 | 0.75±0.44 | 34.39±0.05 | 0.078±.028 | -.064±.026 | 0.005±.046 |
| April | 720 | 0.23±0.21 | 34.33±0.03 | 0.078±.031 | -.064±.031 | 0.006±.044 |
| May | 744 | 0.49±0.20 | 34.34±0.03 | 0.057±.030 | -.036±.032 | 0.001±.042 |
| June | 720 | 1.00±0.24 | 34.39±0.03 | 0.071±.038 | -.057±.037 | 0.006±.044 |
| July | 744 | 0.39±0.51 | 34.30±0.06 | 0.096±.035 | -.086±.033 | 0.009±.042 |
| August | 476 | 0.66±0.51 | 34.29±0.06 | 0.097±.032 | -.084±.032 | 0.007±.048 |



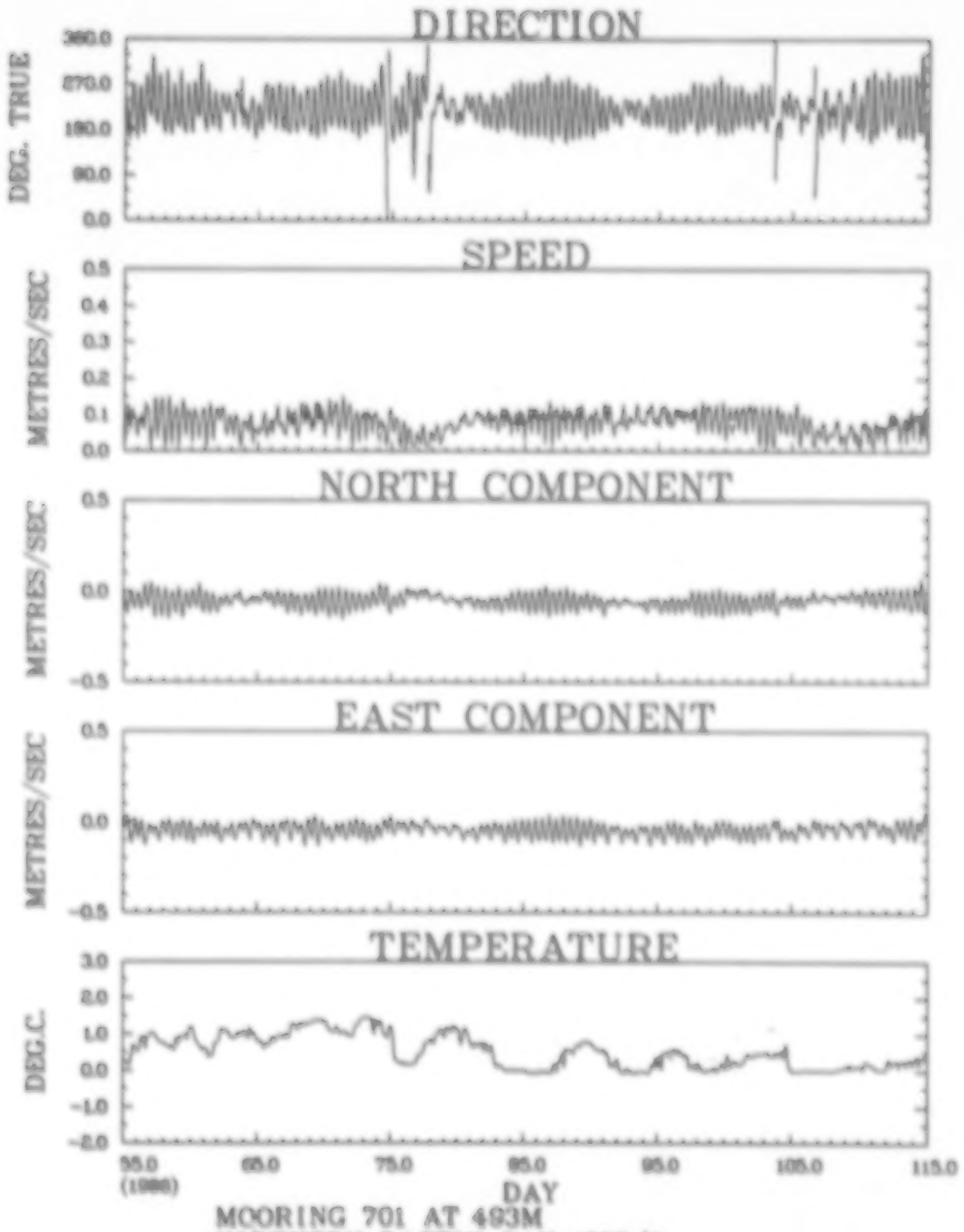

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6



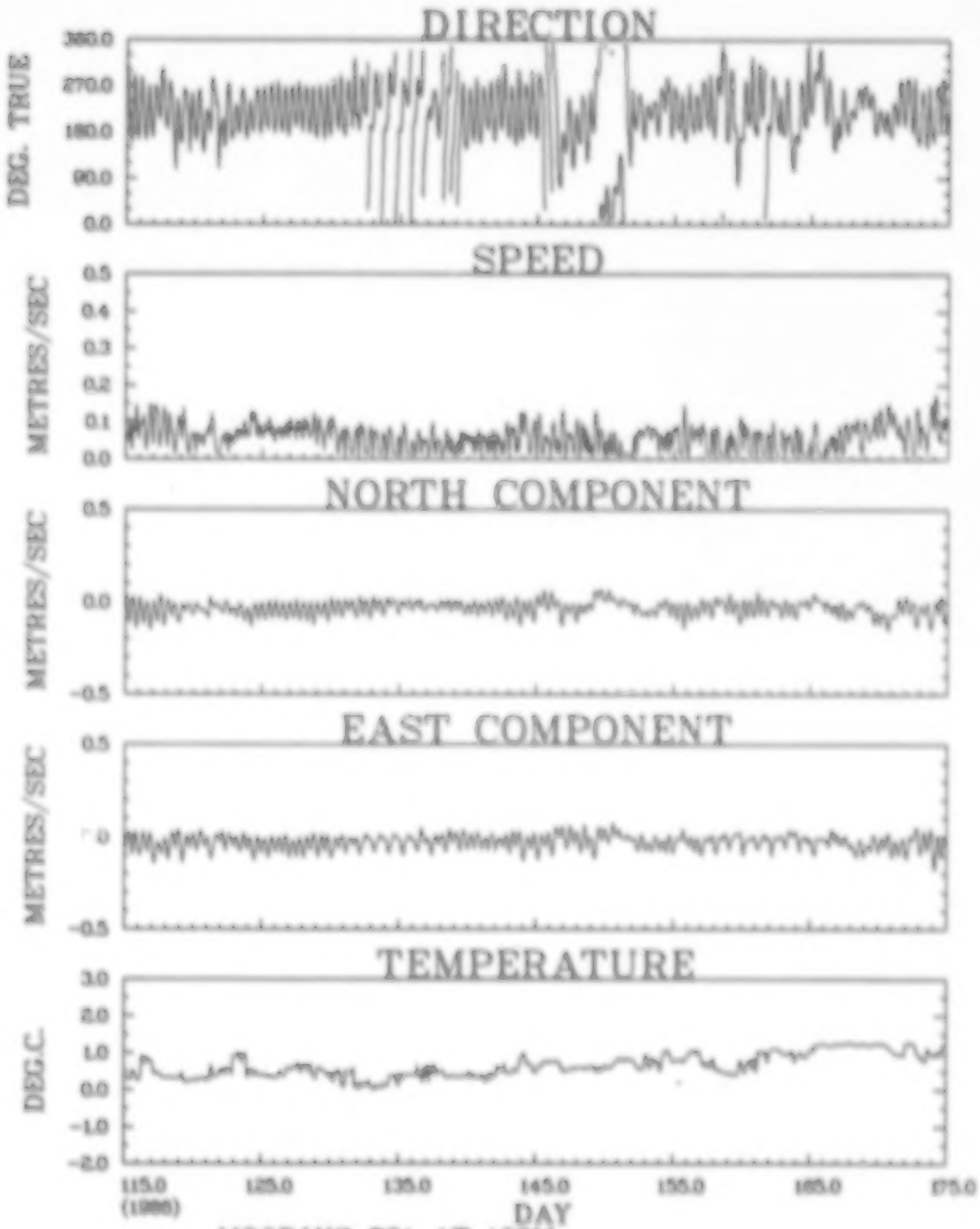

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6



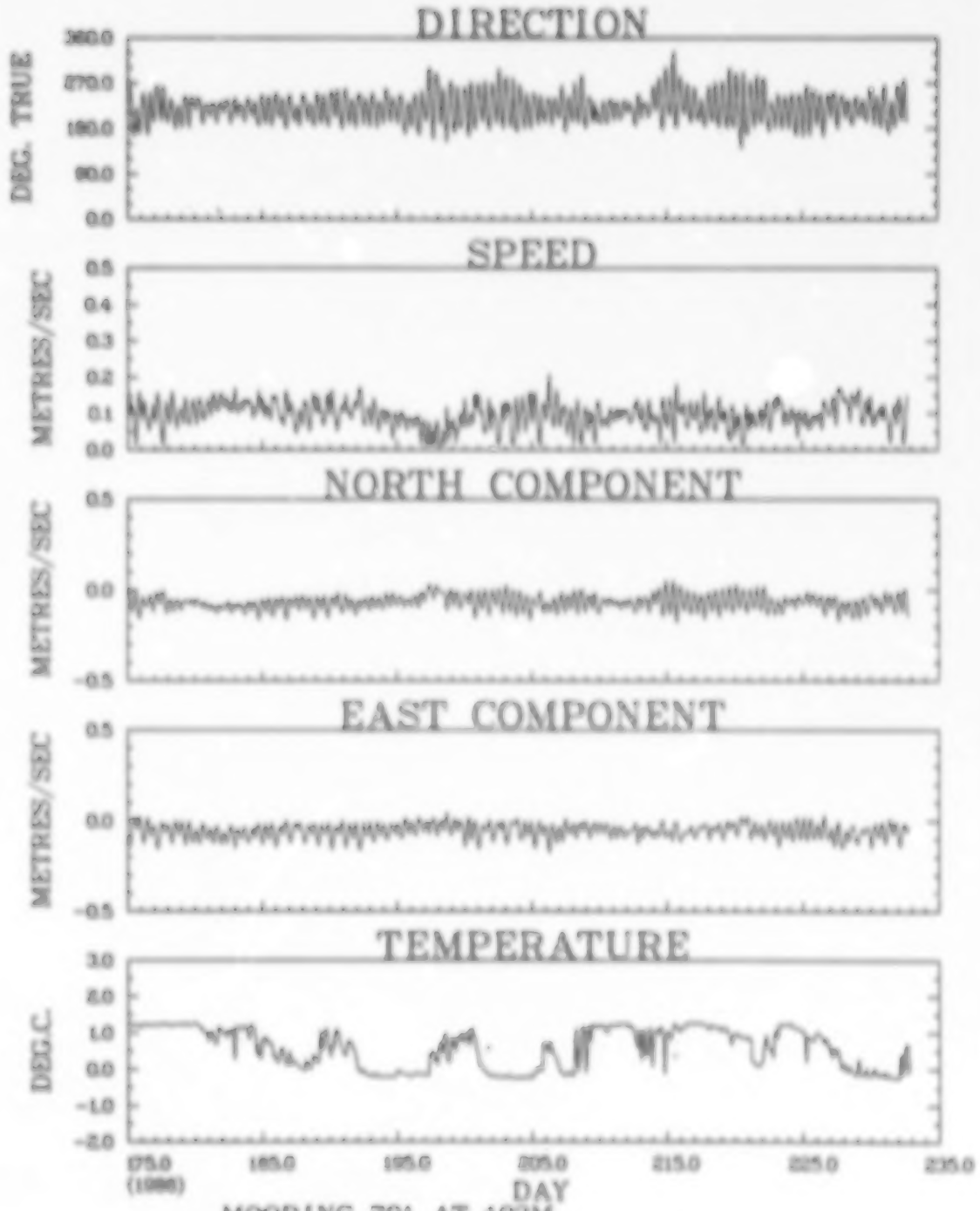

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6



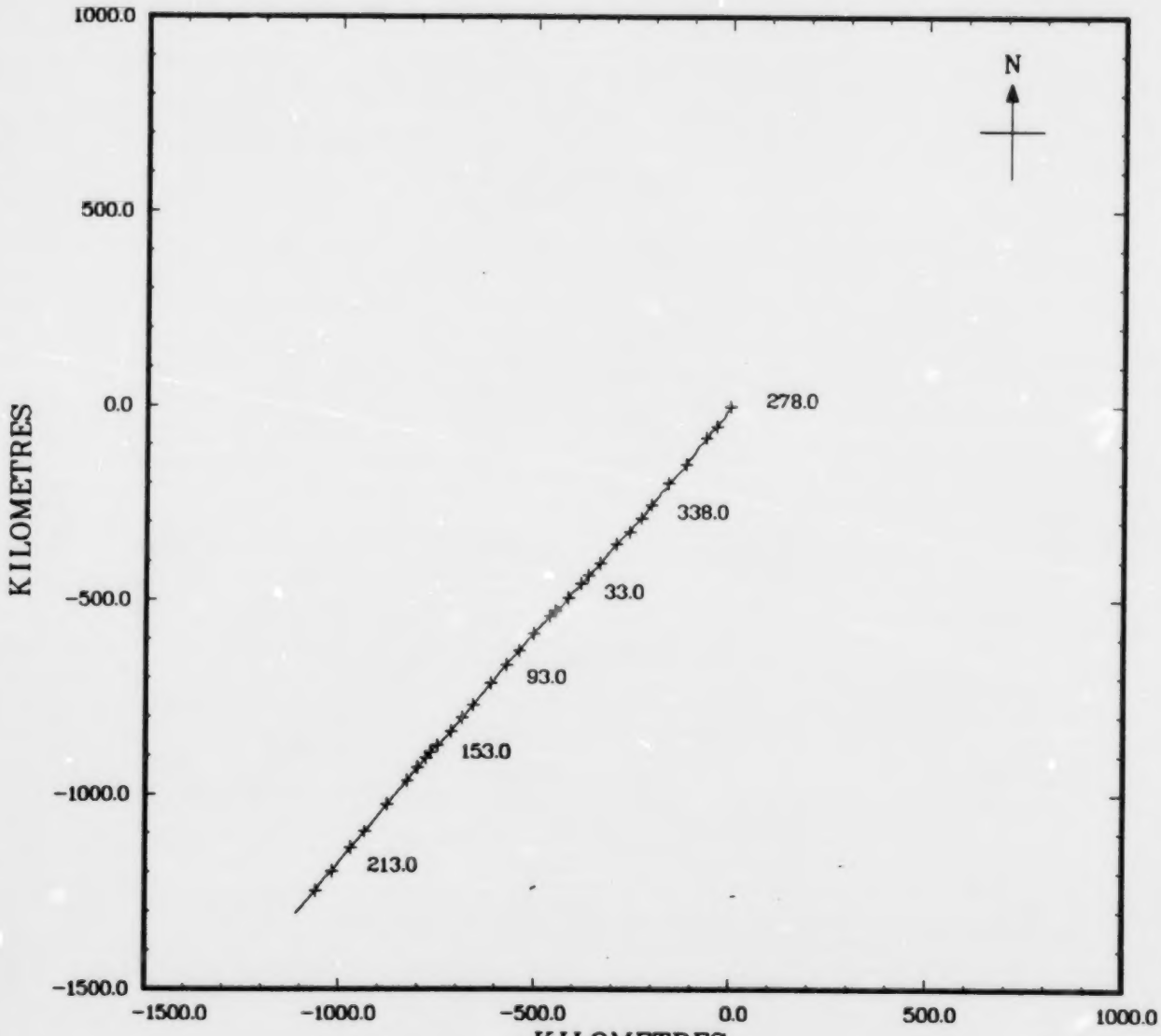

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6



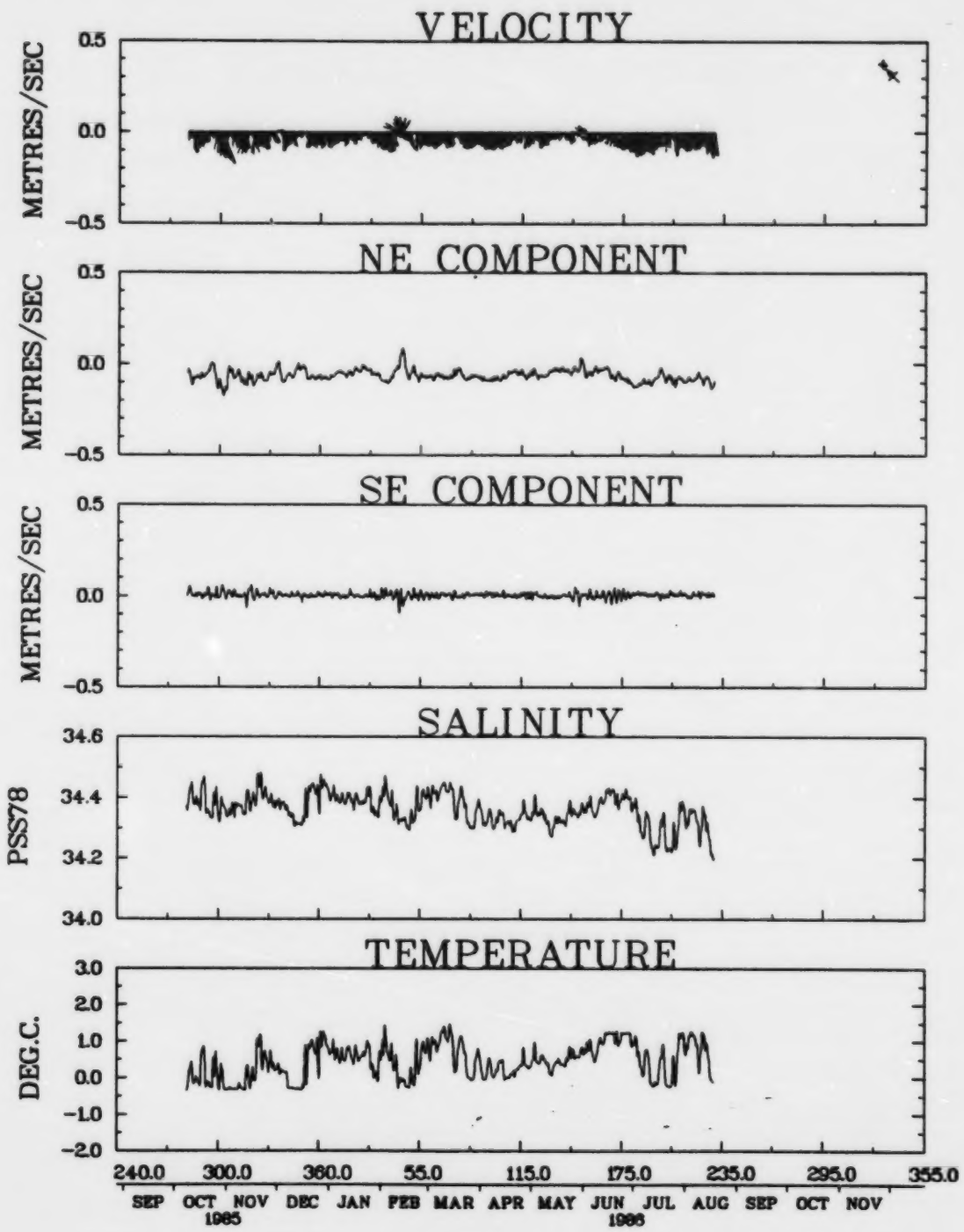

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6



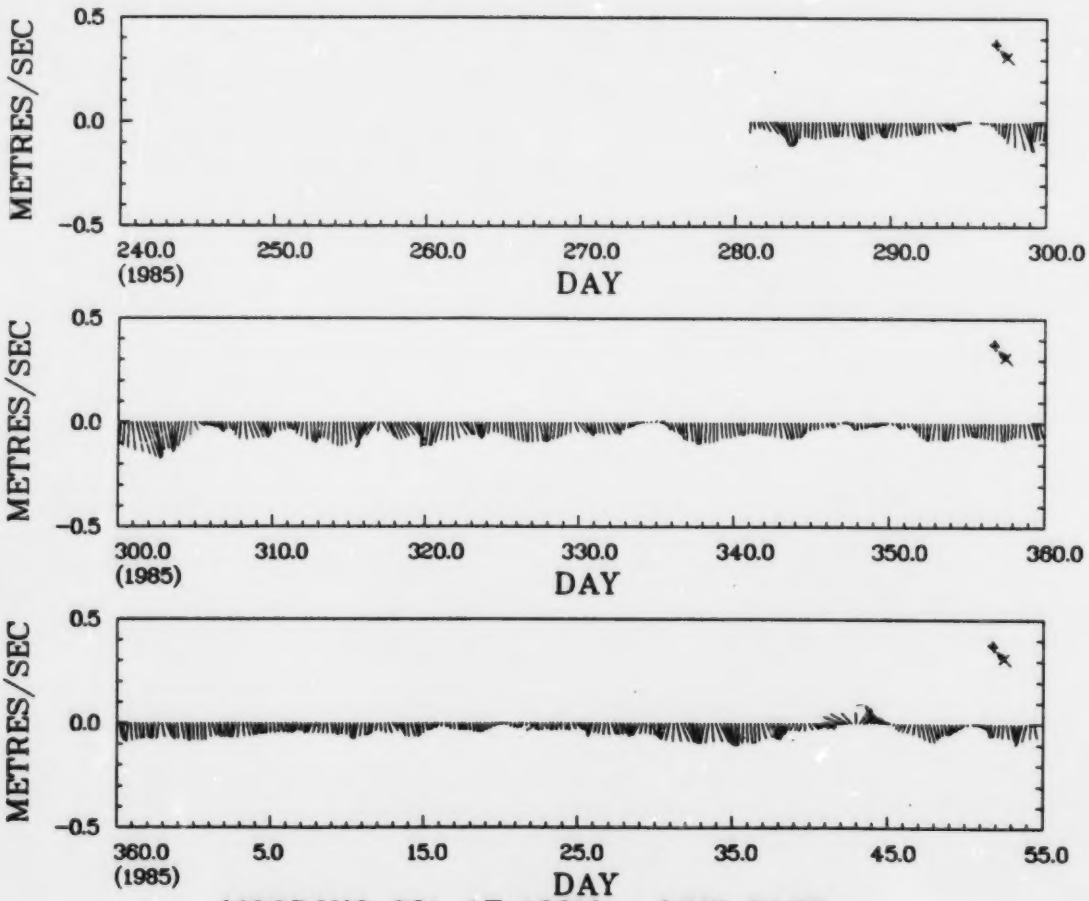

MOORING 701 AT 493M
NORTHERN BAFFIN LAY 1985/6



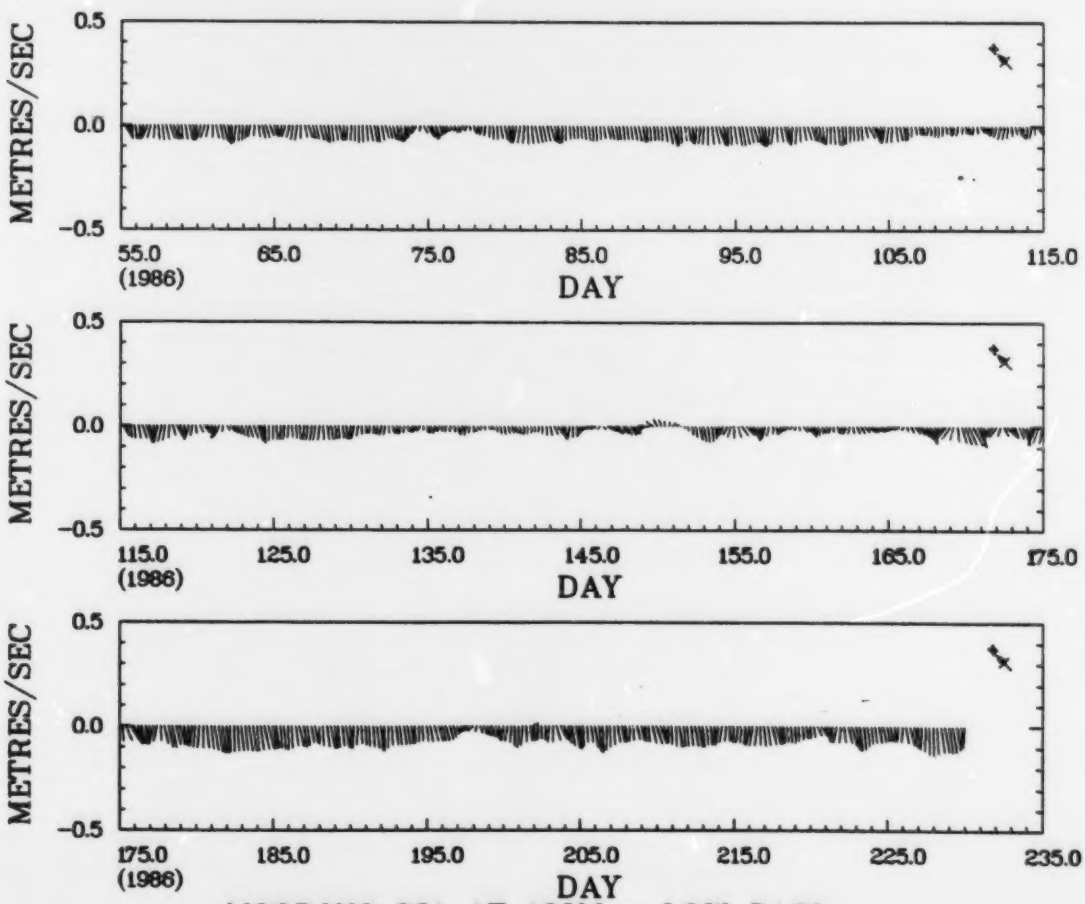

MOORING 701 AT 493M
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 493M – LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 701 AT 493M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



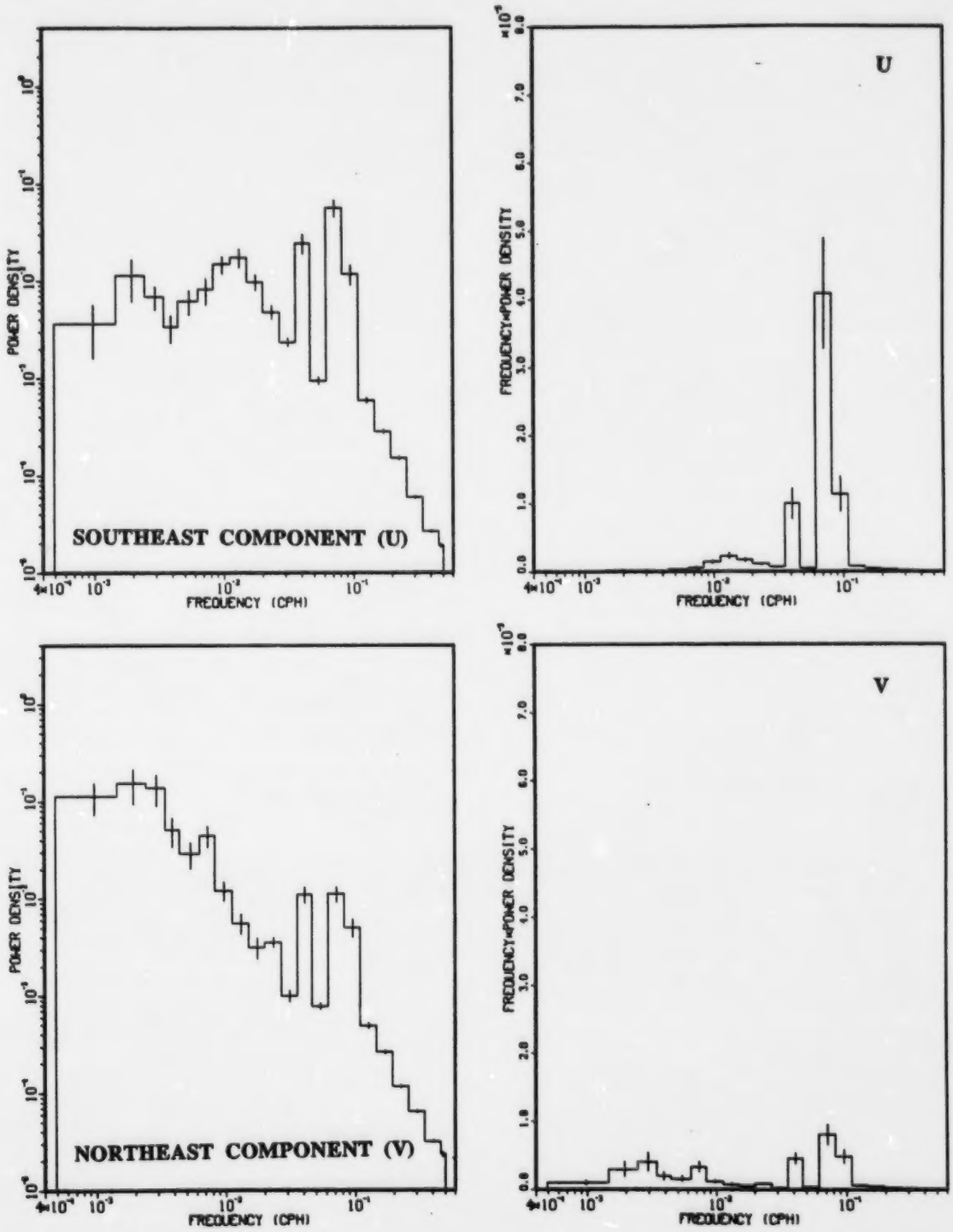

MOORING 701 AT 493M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 701**
**Depth 493 m**

Tidal Analysis

320.2 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .019 | .006 | 109 | 67 | C | .009 | 292 | .018 | 61 |
| O1 | .010 | .005 | 99 | 11 | C | .005 | 265 | .010 | 7 |
| P1 | .006 | .003 | 113 | 71 | C | .003 | 293 | .006 | 62 |
| M2 | .048 | .019 | 316 | 44 | A | .037 | 23 | .036 | 247 |
| S2 | .024 | .006 | 344 | 59 | A | .023 | 55 | .009 | 278 |
| N2 | .011 | .004 | 123 | 207 | A | .006 | 0 | .009 | 219 |
| K2 | .006 | .003 | 327 | 73 | A | .006 | 58 | .004 | 285 |
| MF | .004 | .001 | 47 | 231 | A | .003 | 240 | .003 | 224 |
| M4 | .001 | .001 | 338 | 315 | A | .001 | 297 | .001 | 198 |
| MS4 | .001 | .000 | 40 | 191 | A | .001 | 200 | .001 | 179 |




MOORING 701 AT 493M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 702**
**Depth 229 m**

| | | | |
|---|---|---|---|
| Latitude | 76° 00.7N | Deployment | 1829Z 3 Oct., 1985 |
| Longitude | 76° 04.7W | Recovery | 1353Z 21 Aug., 1986 |
| Water Depth | 314 m | Duration | 321 d |

**RECORD LENGTH STATISTICS**

| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7722 | 235 | 237 | 236 | 0.2 |
| Temperature (T) | °C | 7722 | -1.83 | 0.65 | -0.59 | 0.44 |
| Salinity (S) | PSS78 | 7365 | 33.32 | 34.20 | 33.93 | 0.13 |
| Speed (R) | $m.s^{-1}$ | 7722 | 0.015 | 0.406 | 0.102 | 0.056 |
| Northeast Component (V) | $m.s^{-1}$ | 7722 | -.320 | 0.216 | -.029 | 0.065 |
| Southeast Component (U) | $m.s^{-1}$ | 7722 | -.323 | 0.362 | 0.015 | 0.090 |

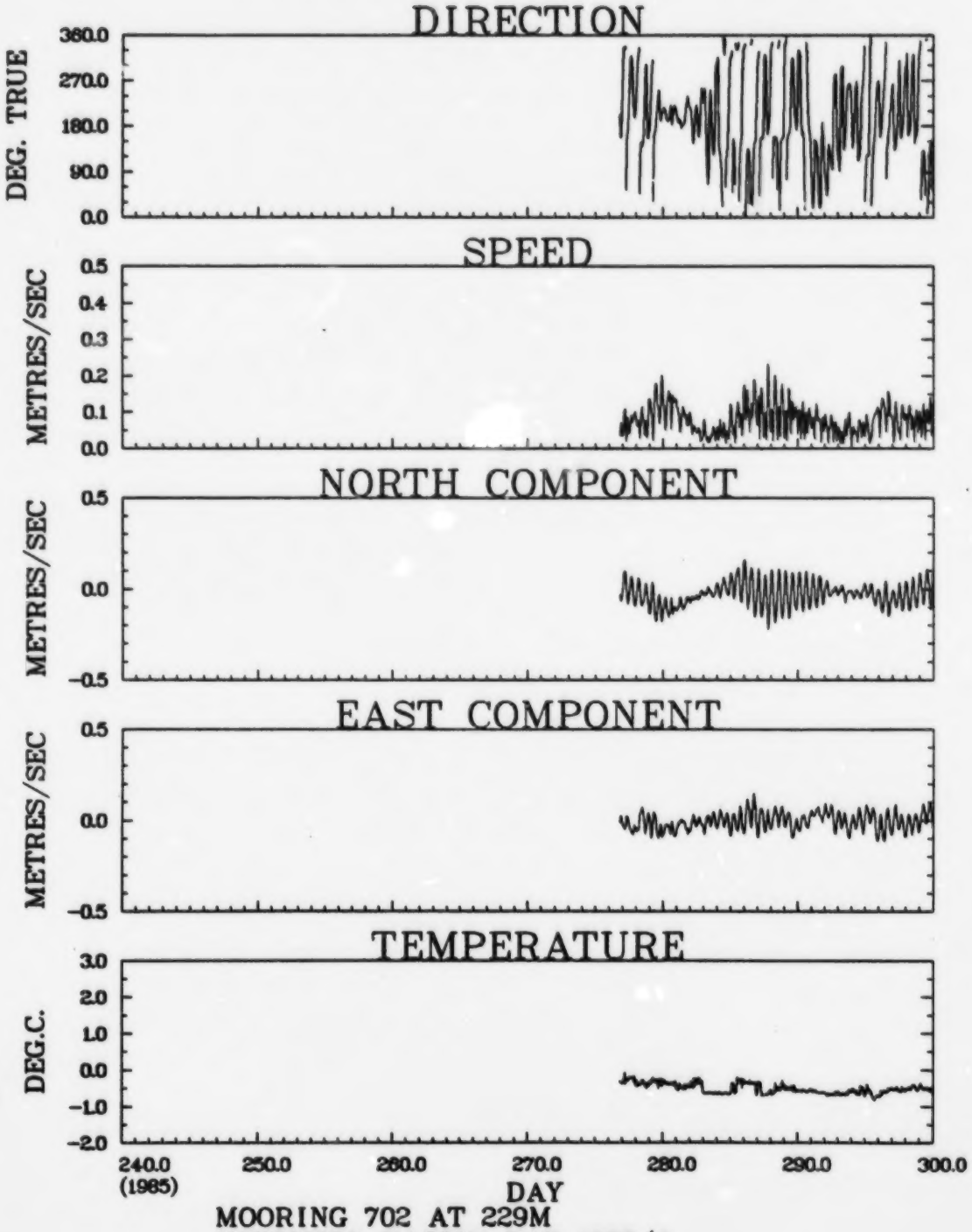
**MONTHLY MEANS**

| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 676 | -0.53±0.13 | 34.05±0.05 | 0.080±.039 | -.023±.048 | 0.015±.069 |
| November | 720 | -0.70±0.25 | 33.94±0.14 | 0.101±.071 | -.050±.067 | 0.023±.088 |
| December | 744 | -0.51±0.47 | 33.84±0.15 | 0.094±.052 | -.024±.062 | 0.019±.083 |
| January | 744 | -0.57±0.43 | 33.86±0.12 | 0.094±.049 | -.030±.055 | 0.026±.084 |
| February | 672 | -0.63±0.57 | 33.89±0.11 | 0.119±.062 | -.049±.081 | 0.016±.094 |
| March | 744 | -1.02±0.37 | 33.83±0.07 | 0.120±.056 | -.064±.051 | 0.036±.097 |
| April | 720 | -0.76±0.37 | 33.91±0.05 | 0.110±.057 | -.037±.056 | 0.019±.103 |
| May | 744 | -0.60±0.26 | 33.94±0.05 | 0.100±.053 | -.019±.063 | 0.022±.090 |
| June | 720[a] | -0.72±0.52 | 33.88±0.11 | 0.112±.059 | -.020±.078 | -.002±.098 |
| July | 744[b] | -0.14±0.20 | 34.06±0.04 | 0.088±.042 | 0.004±.056 | -.019±.078 |
| August | 494 | -0.18±0.08 | 34.04±0.04 | 0.103±.050 | -.003±.060 | 0.005±.098 |

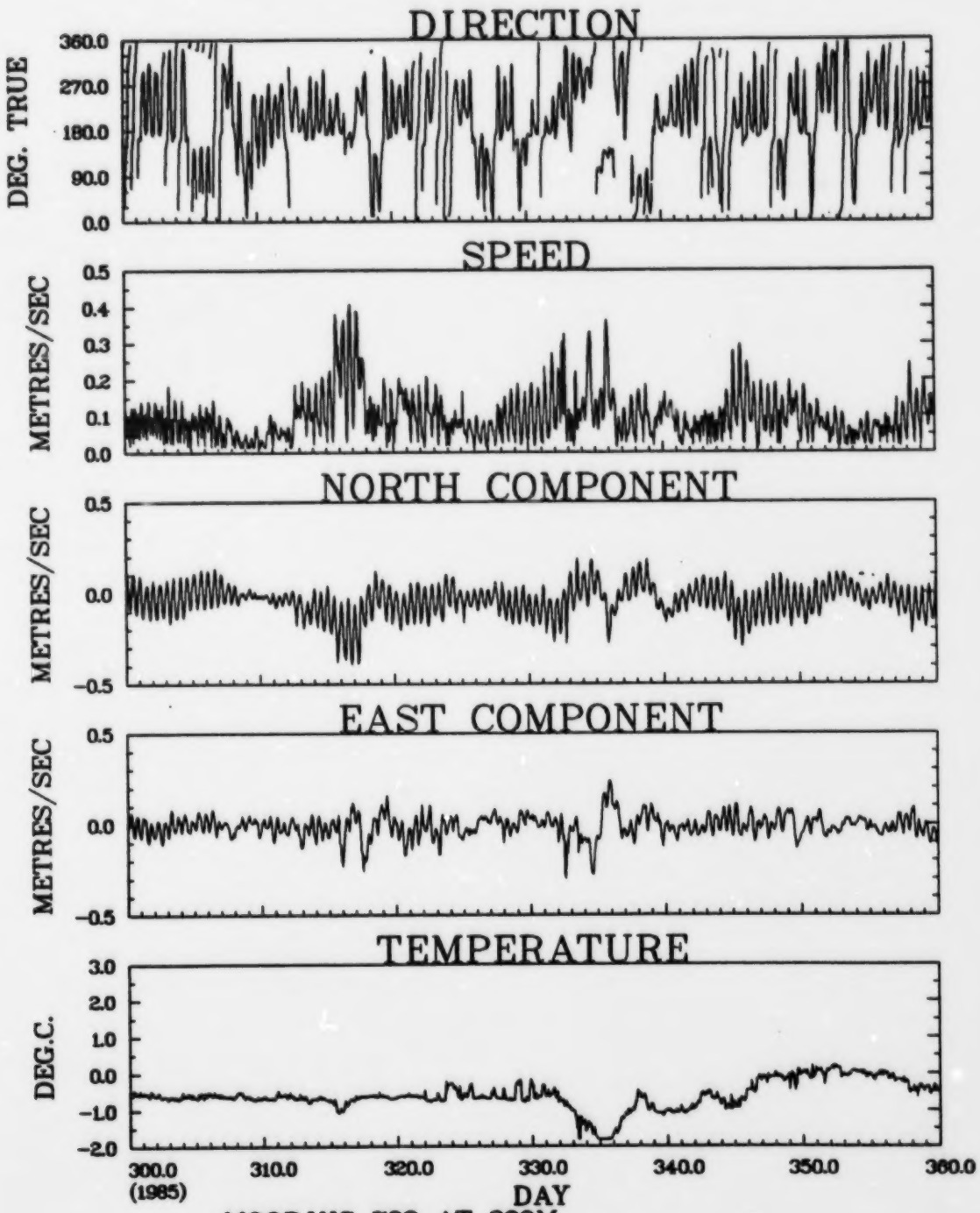
Notes

[a] only 442 samples for salinity

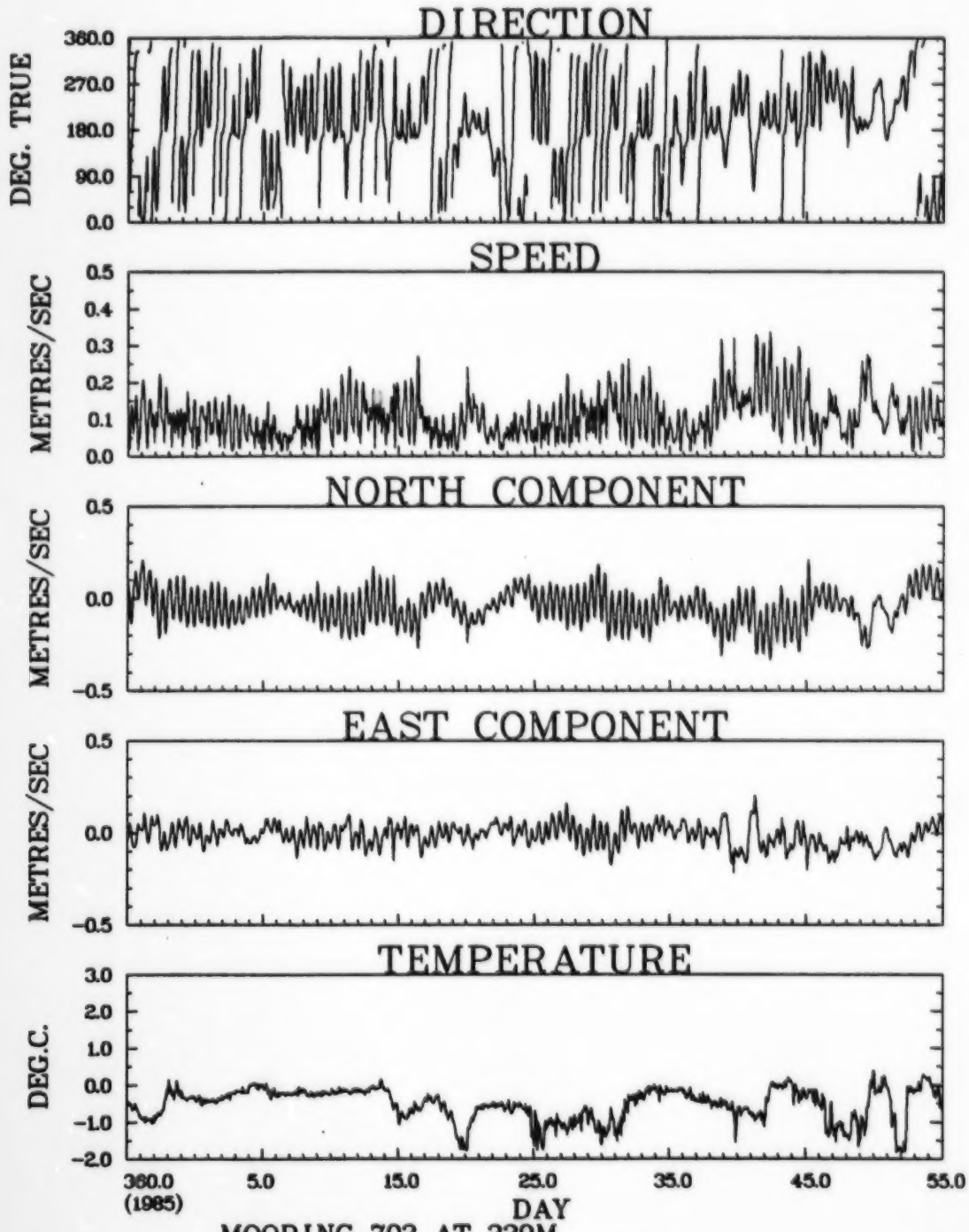
[b] only 673 samples for salinity



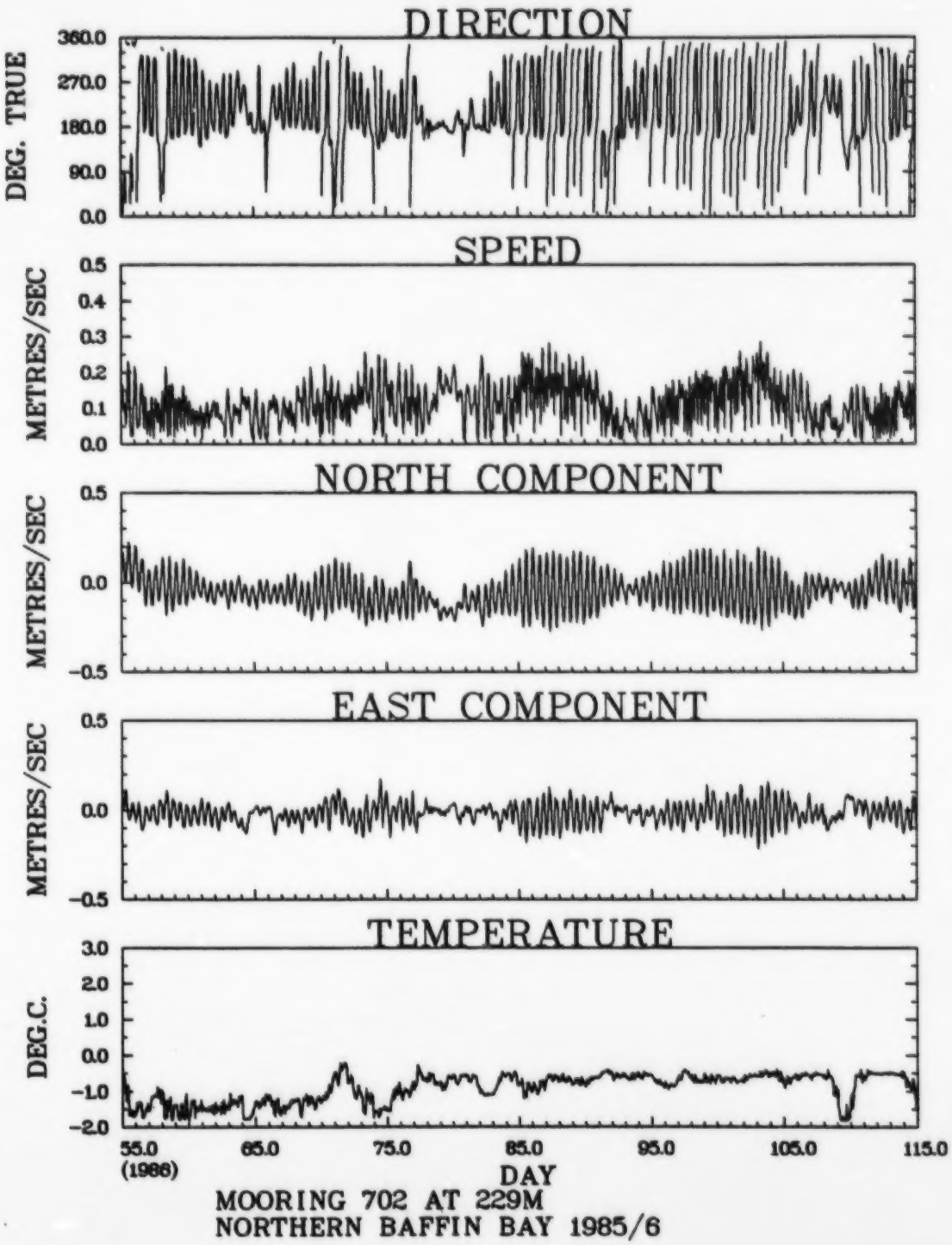

MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/3



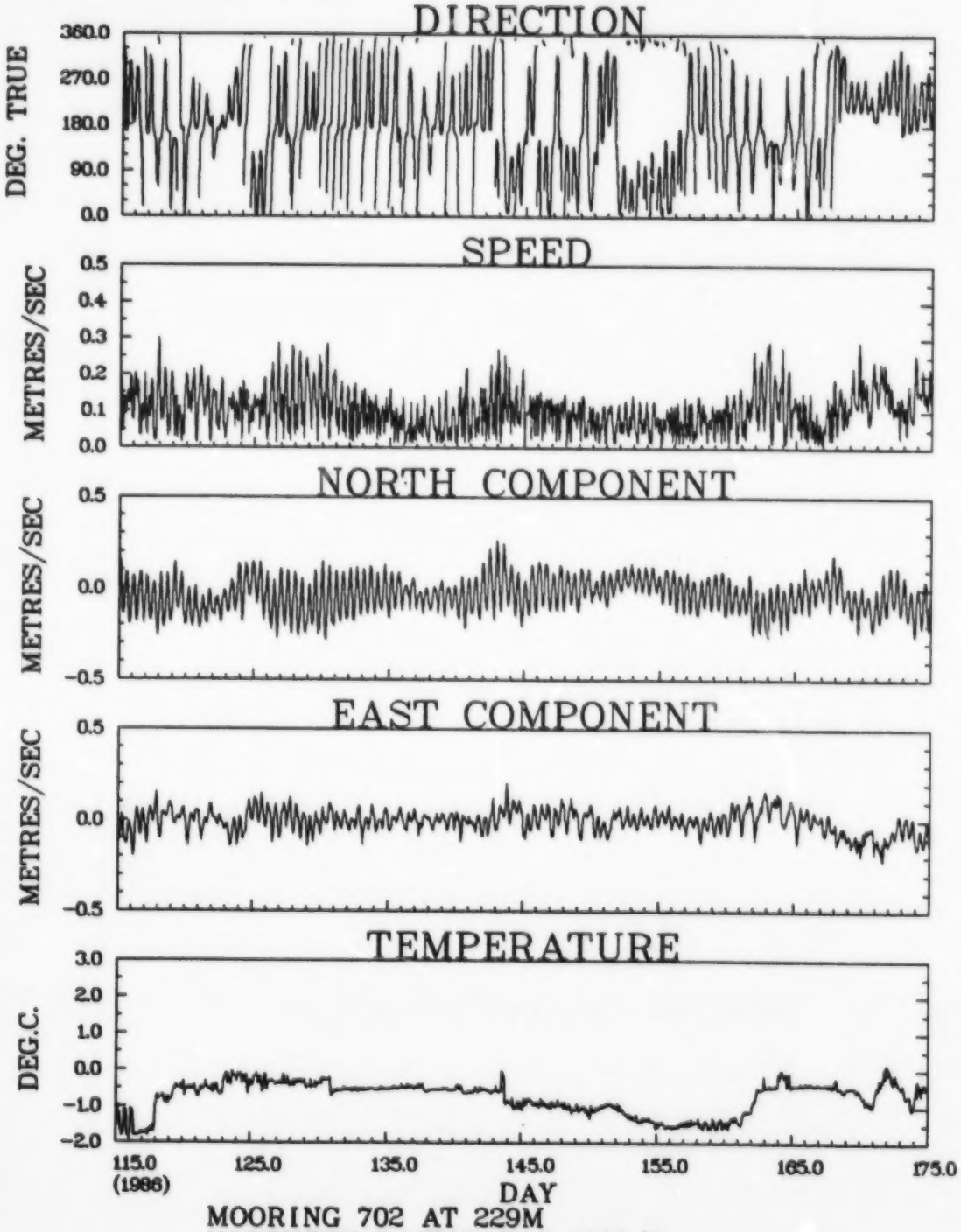

MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/6



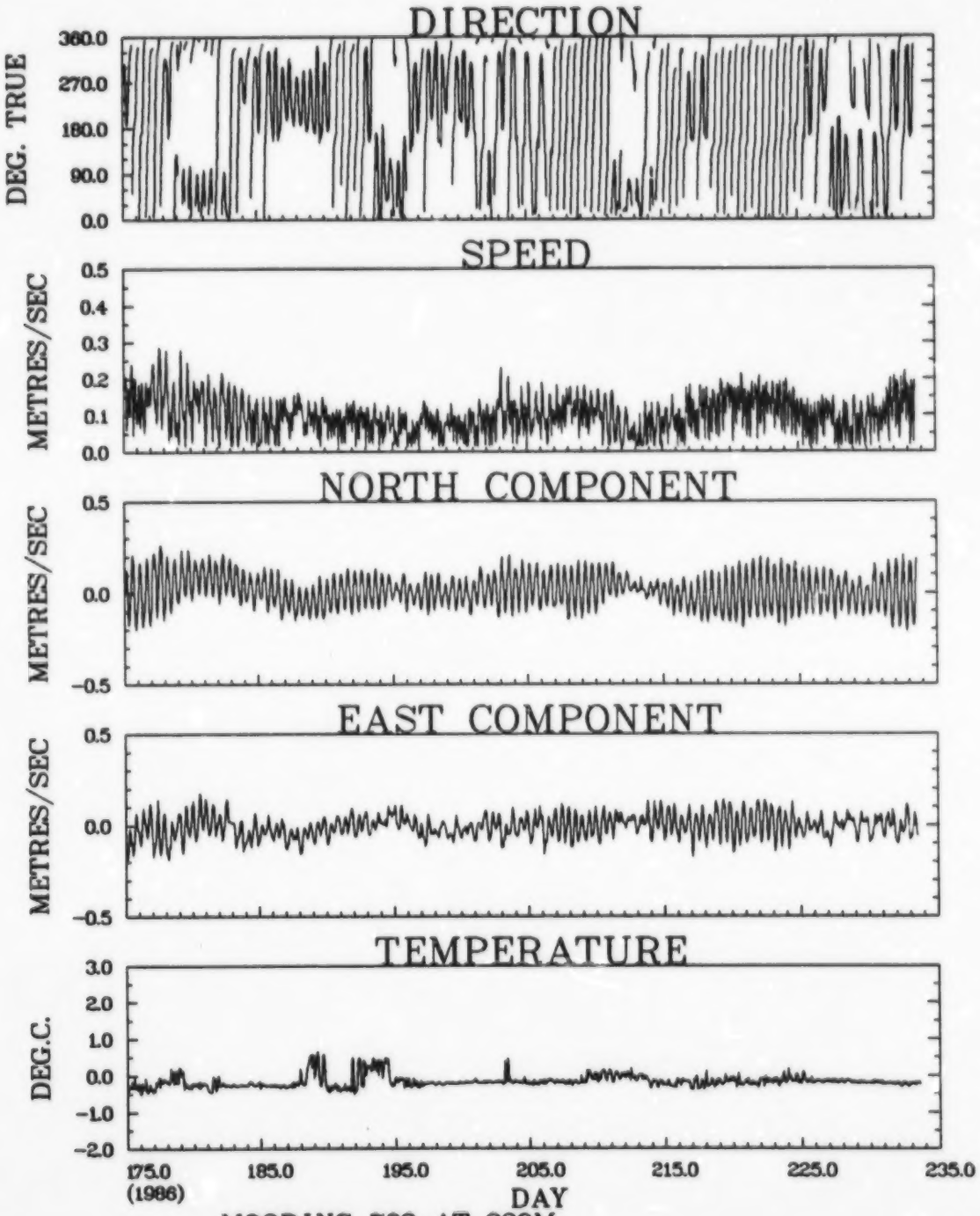

MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/6

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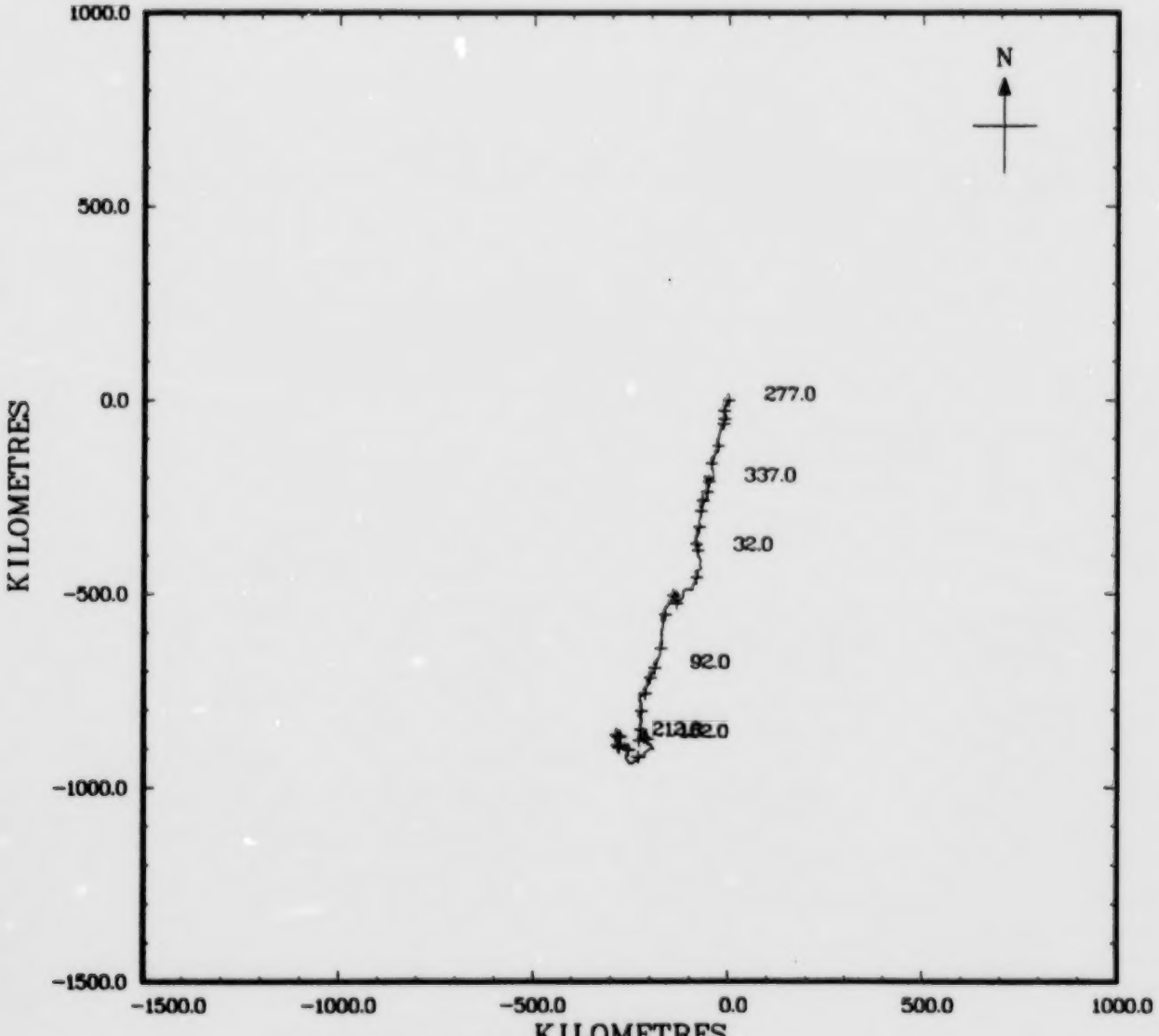
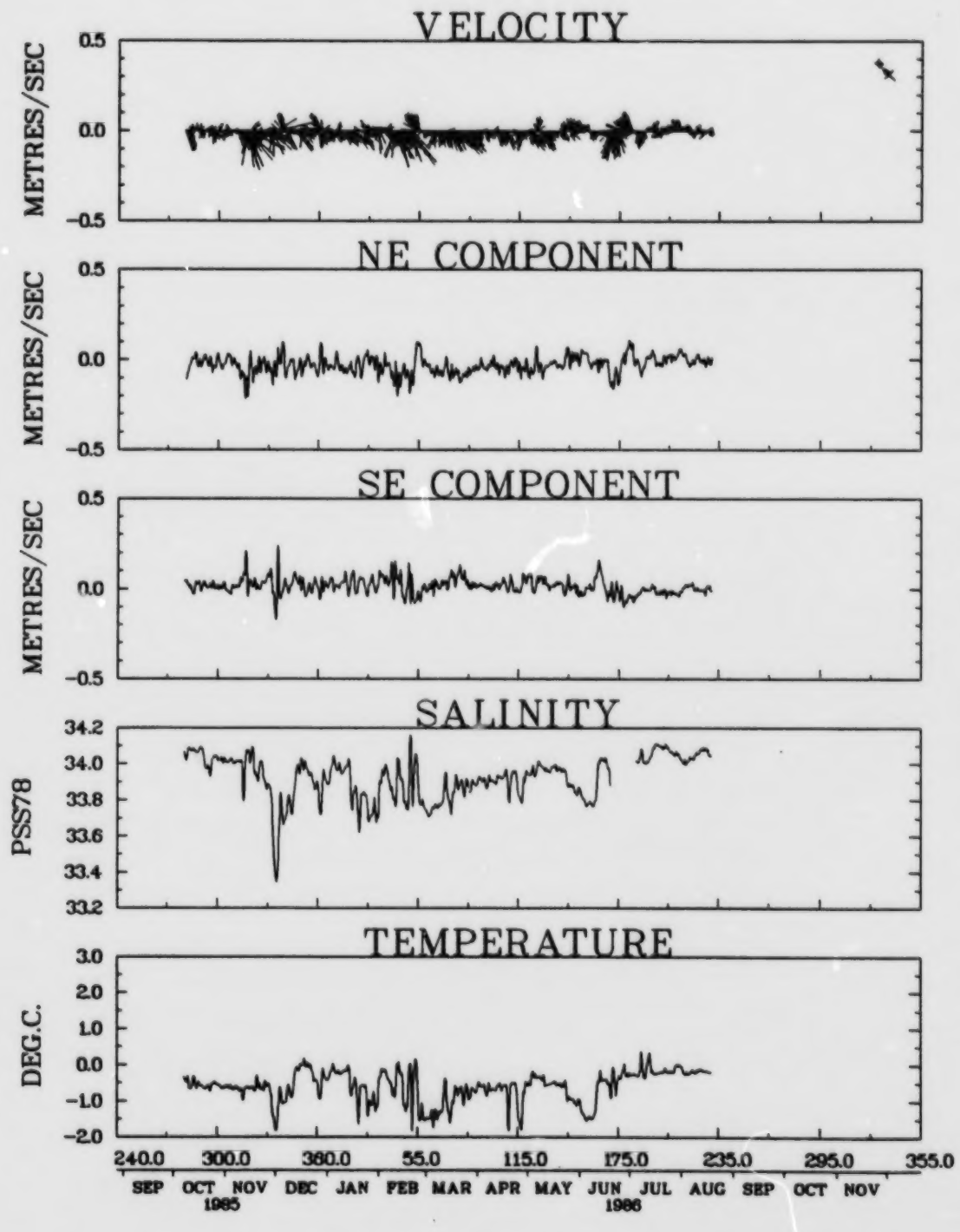
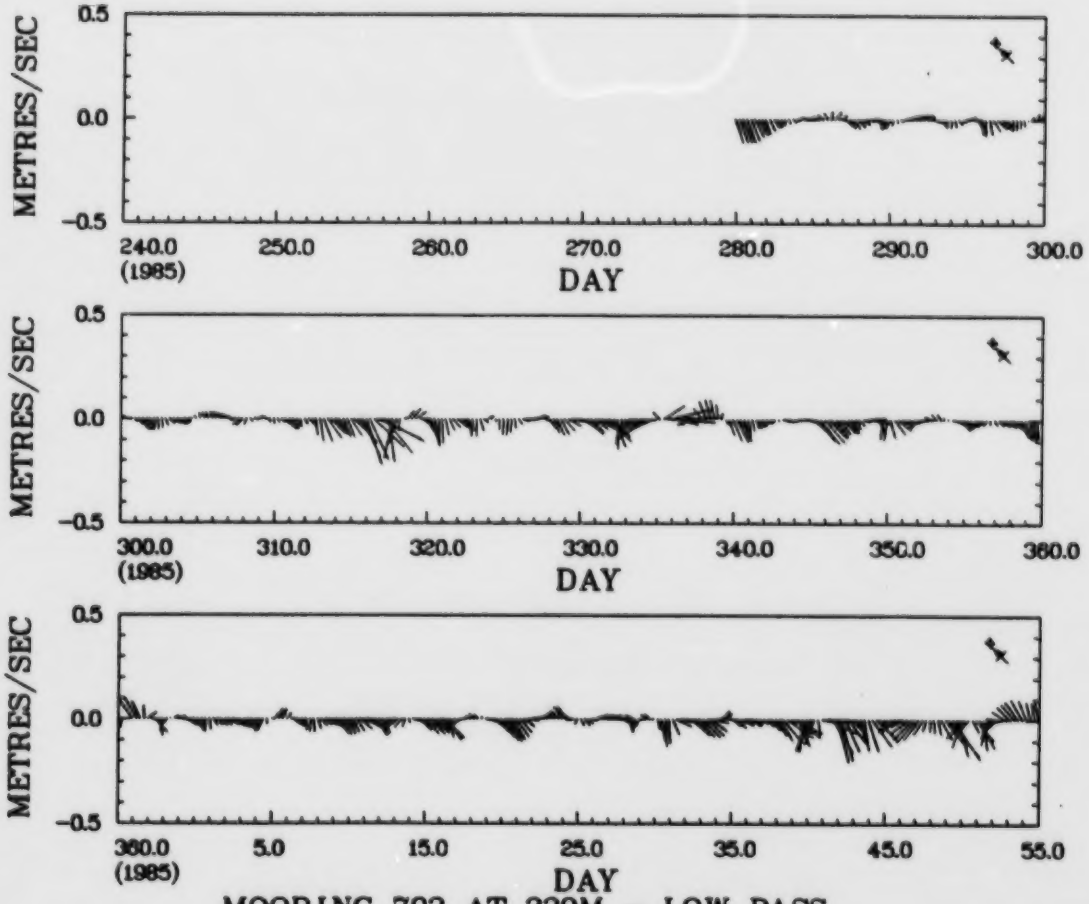
NORTHERN BAFFIN BAY 1985/6



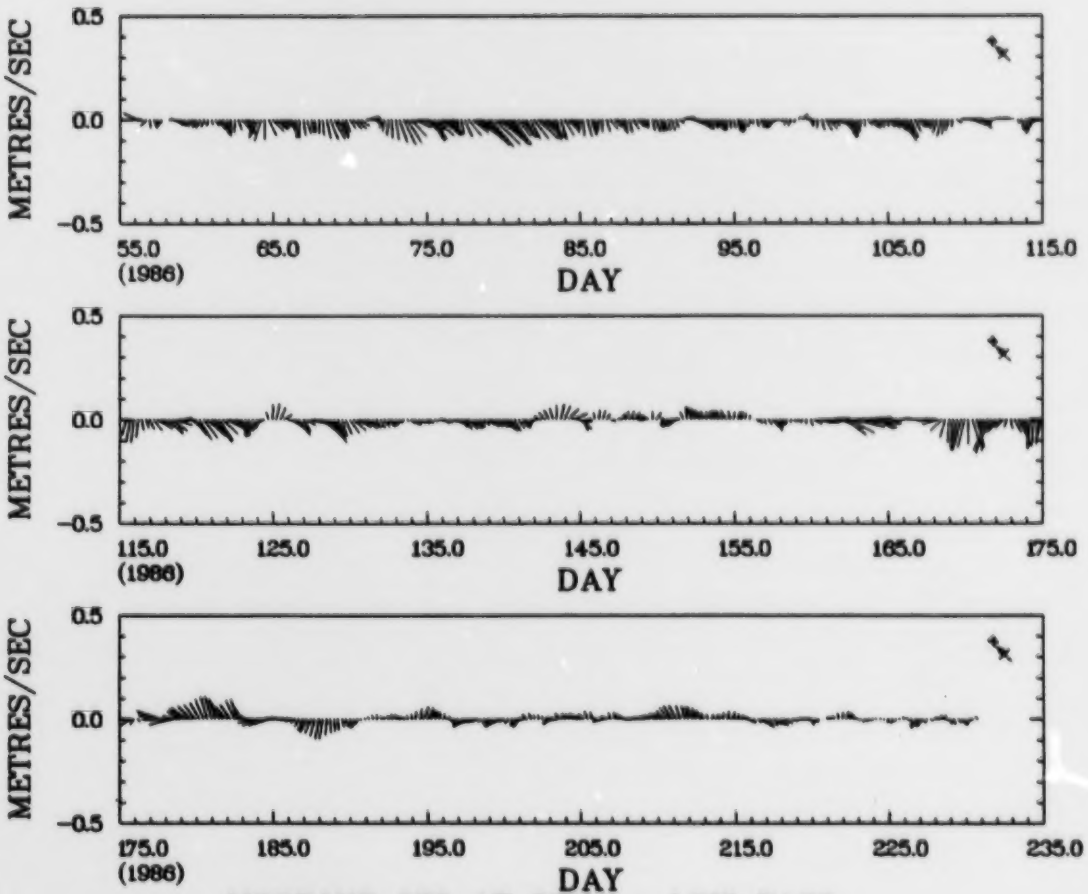

MOORING 702 AT 229M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 229M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 229M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



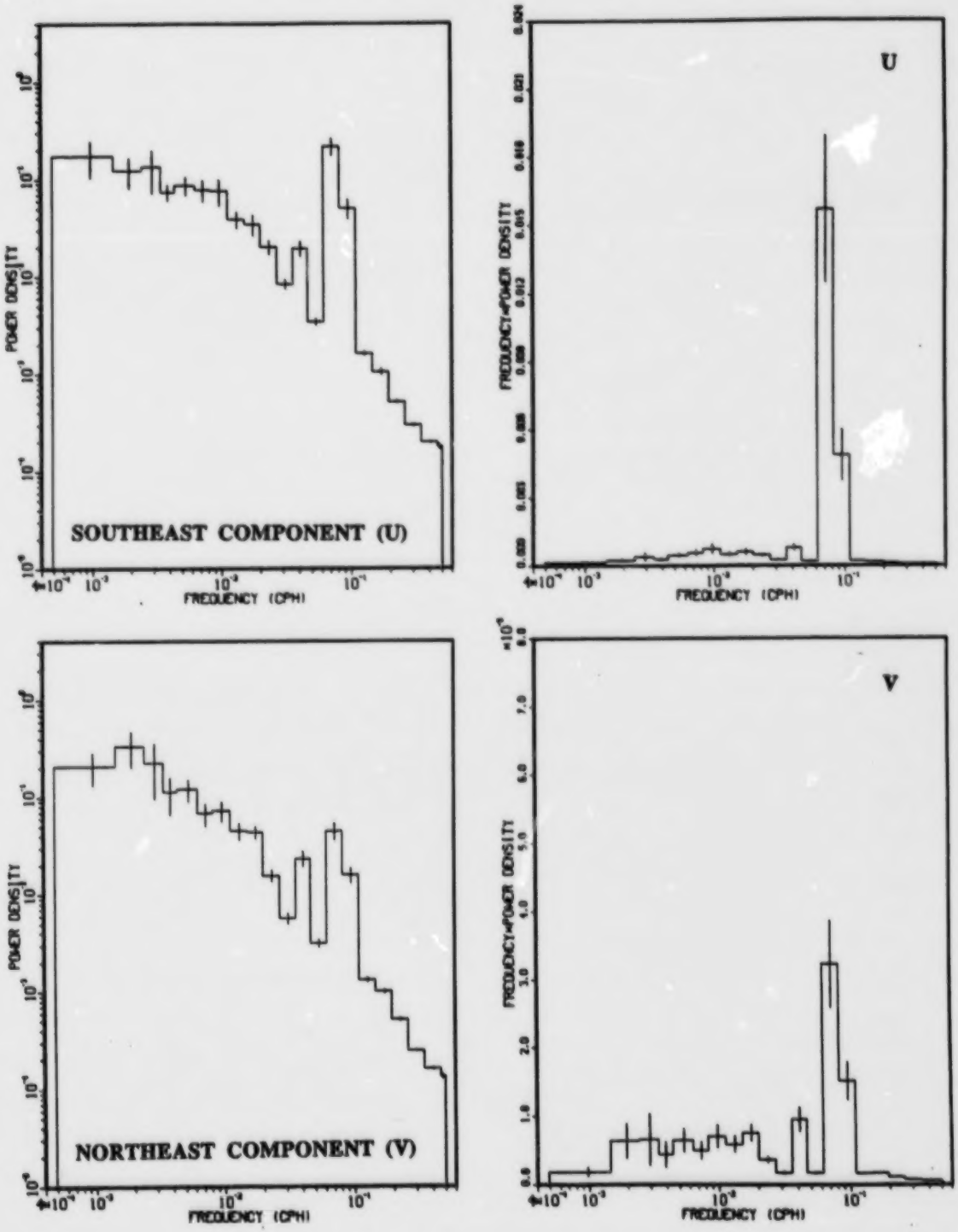

MOORING 702 AT 229M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 702**
**Depth 229 m**

**Tidal Analysis**

321.8 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|---|
| K1 | .019 | .005 | 85 | 64 | C | | .005 | 353 | .019 | 65 |
| O1 | .011 | .005 | 80 | 1 | C | | .006 | 291 | .011 | 6 |
| P1 | .007 | .003 | 99 | 72 | C | | .003 | 323 | .007 | 68 |
| M2 | .101 | .010 | 336 | 23 | C | | .093 | 25 | .042 | 189 |
| S2 | .045 | .007 | 331 | 71 | C | | .040 | 76 | .023 | 236 |
| N2 | .019 | .002 | 345 | 350 | C | | .019 | 351 | .005 | 150 |
| K2 | .016 | .005 | 336 | 70 | C | | .015 | 77 | .008 | 216 |
| MF | .008 | .002 | 21 | 341 | A | | .008 | 345 | .003 | 315 |
| M4 | .002 | .001 | 342 | 58 | C | | .002 | 65 | .001 | 189 |
| MS4 | .002 | .001 | 315 | 100 | C | | .002 | 135 | .002 | 243 |




MOORING 702 AT 229M - LOW PASS
NORTHERN BAFFIN BAY 1985 6

**Mooring 702**
**Depth 292 m**

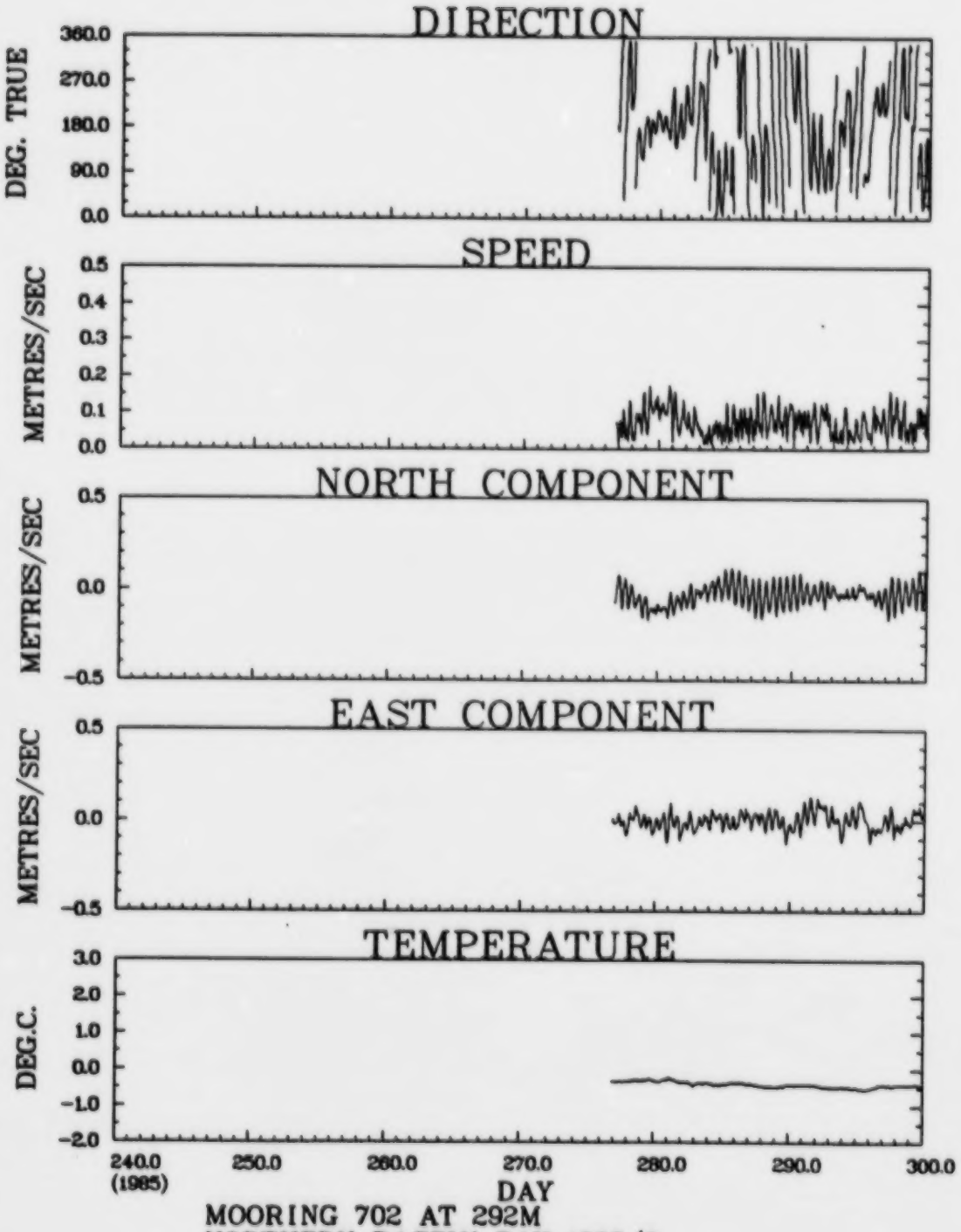
| | | | |
|---|---|---|---|
| Latitude | 76° 00.7N | Deployment | 1829Z 3 Oct., 1985 |
| Longitude | 76° 04.7W | Recovery | 1353Z 21 Aug., 1986 |
| Water Depth | 314 m | Duration | 321 d |

## RECORD LENGTH STATISTICS

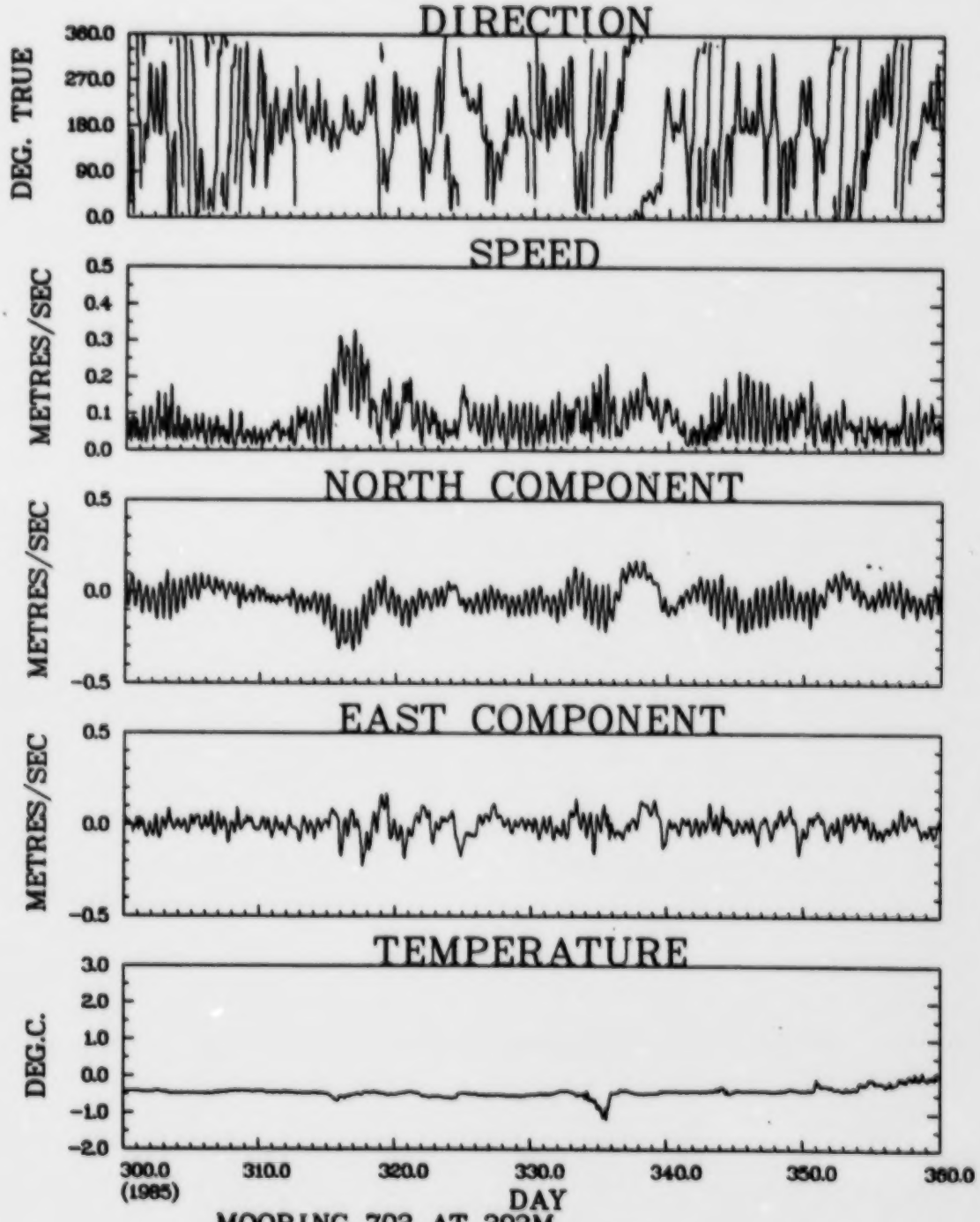
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7722 | 296 | 298 | 296 | 0.2 |
| Temperature (T) | °C | 7722 | -1.19 | 0.51 | -0.21 | 0.19 |
| Salinity (S) | PSS78 | 7719 | 33.56 | 34.34 | 34.17 | 0.07 |
| Speed (R) | $m.s^{-1}$ | 7722 | 0.015 | 0.328 | 0.074 | 0.044 |
| Northeast Component (V) | $m.s^{-1}$ | 7722 | -.274 | 0.242 | -.017 | 0.056 |
| Southeast Component (U) | $m.s^{-1}$ | 7722 | -.183 | 0.279 | 0.019 | 0.061 |

## MONTHLY MEANS

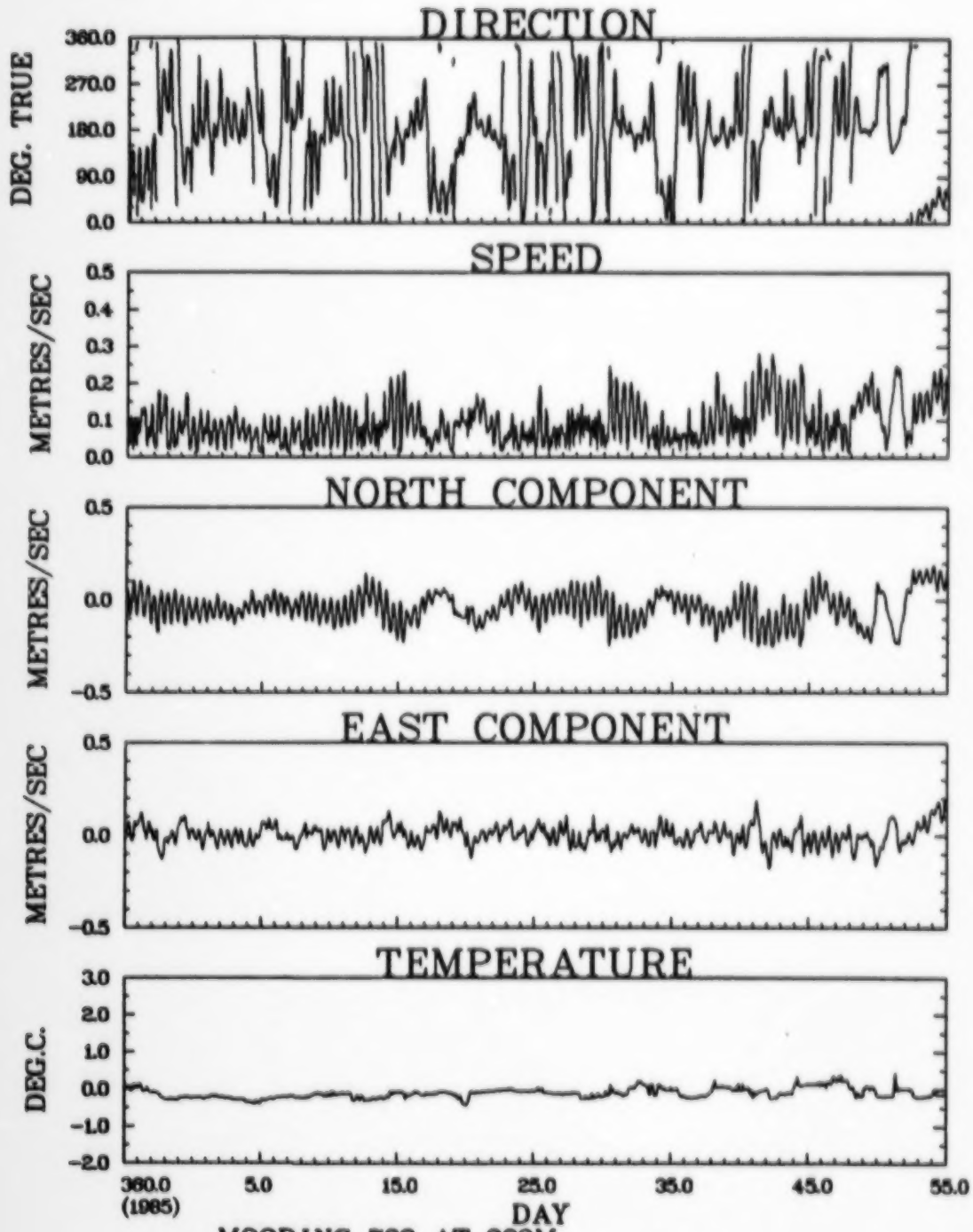
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 676 | -0.41±0.06 | 34.20±0.05 | 0.074±.036 | -.019±.055 | 0.019±.055 |
| November | 720 | -0.50±0.06 | 34.15±0.07 | 0.088±.059 | -.036±.065 | 0.032±.068 |
| December | 744 | -0.30±0.19 | 34.14±0.09 | 0.084±.045 | -.013±.065 | 0.021±.066 |
| January | 744 | -0.17±0.09 | 34.17±0.06 | 0.079±.043 | -.027±.054 | 0.030±.060 |
| February | 672 | -0.03±0.13 | 34.18±0.07 | 0.109±.061 | -.023±.087 | 0.031±.081 |
| March | 744 | -0.12±0.09 | 34.17±0.05 | 0.068±.035 | -.022±.040 | 0.017±.059 |
| April | 720 | -0.13±0.10 | 34.16±0.04 | 0.064±.034 | -.016±.040 | 0.013±.057 |
| May | 744 | -0.27±0.06 | 34.13±0.04 | 0.061±.033 | -.009±.038 | 0.013±.055 |
| June | 720 | -0.27±0.10 | 34.18±0.09 | 0.081±.043 | -.011±.068 | 0.018±.058 |
| July | 744 | 0.01±0.19 | 34.24±0.03 | 0.053±.026 | -.000±.041 | 0.001±.043 |
| August | 494 | -0.12±0.12 | 34.21±0.03 | 0.052±.024 | -.006±.035 | 0.009±.044 |



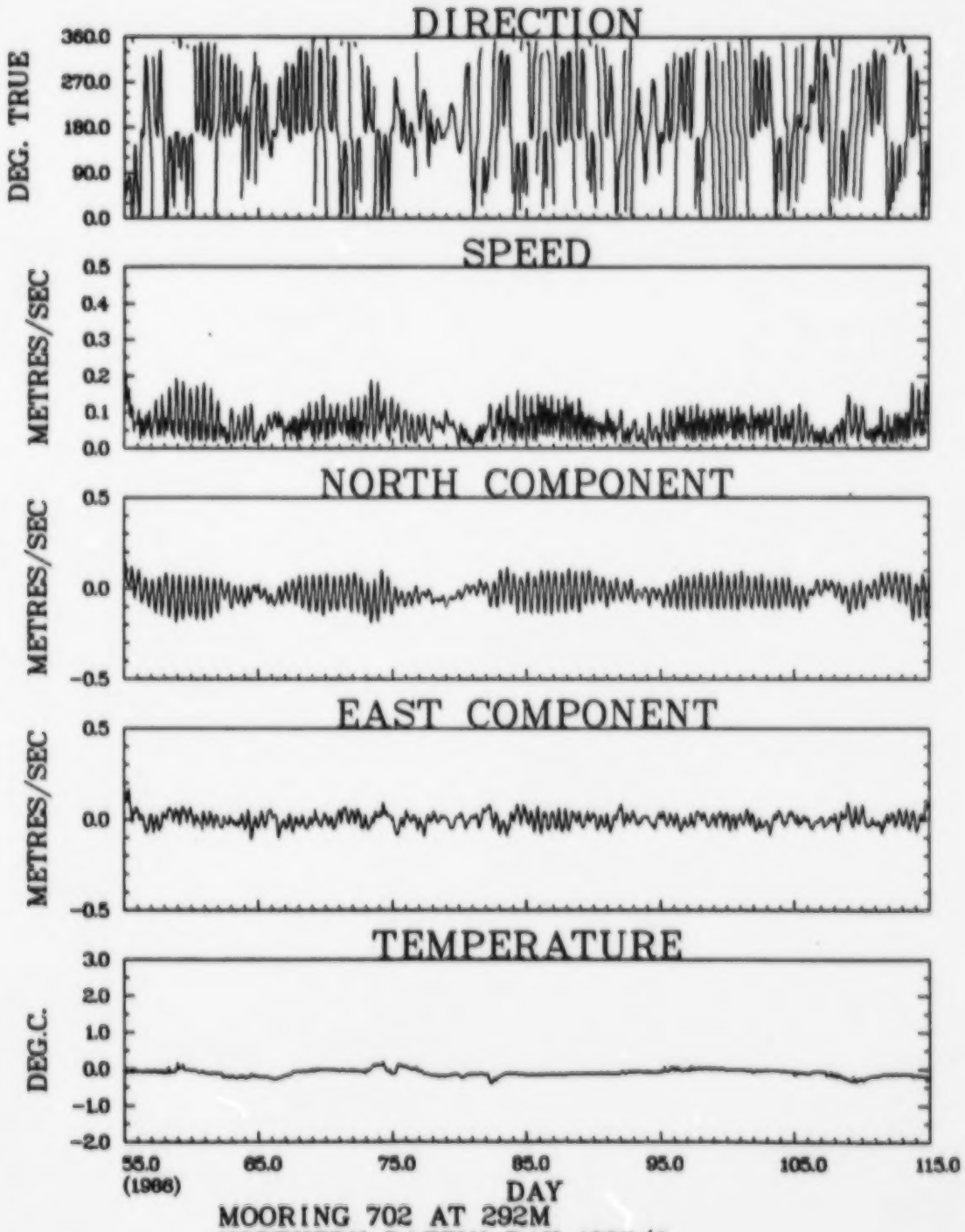

MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6

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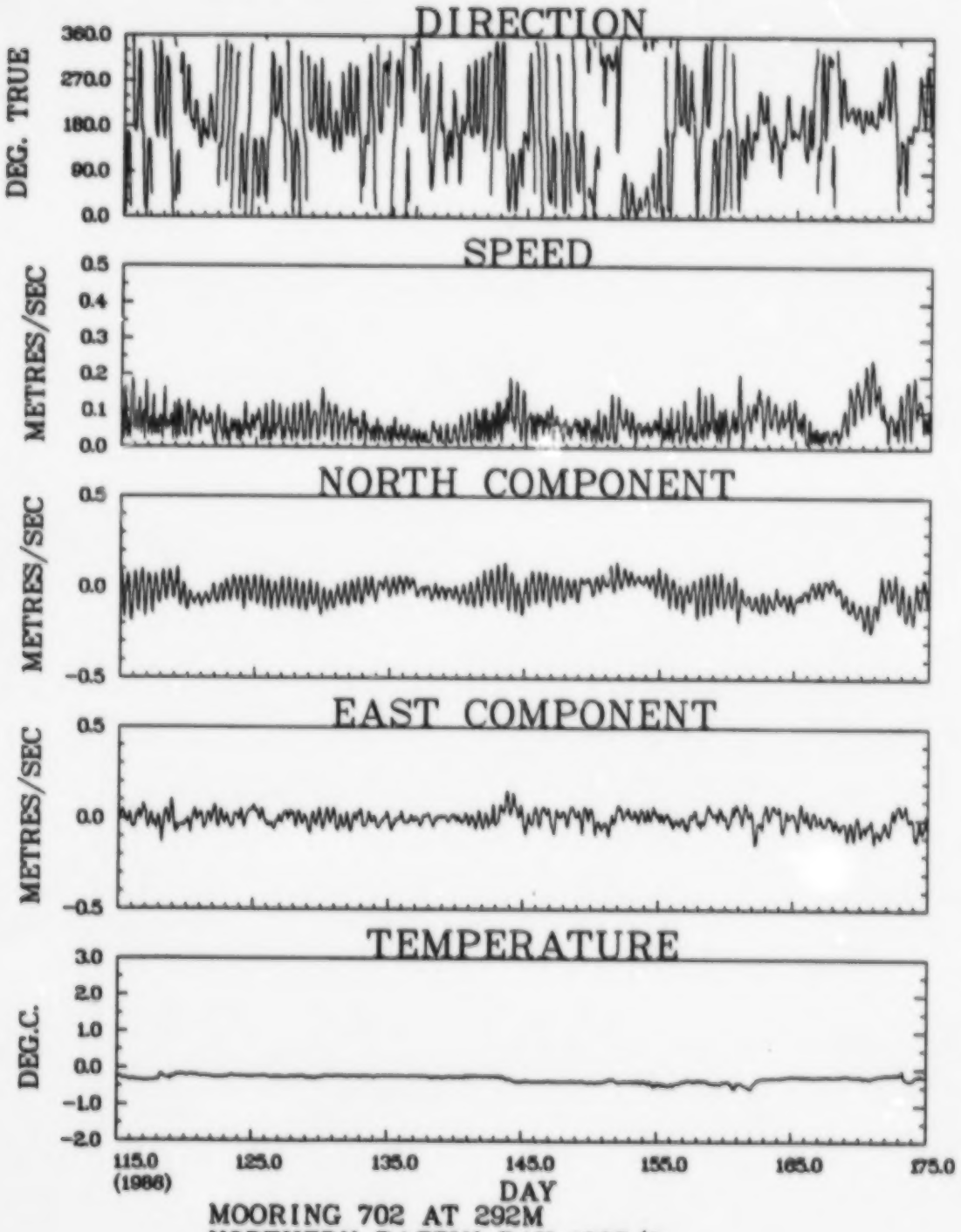
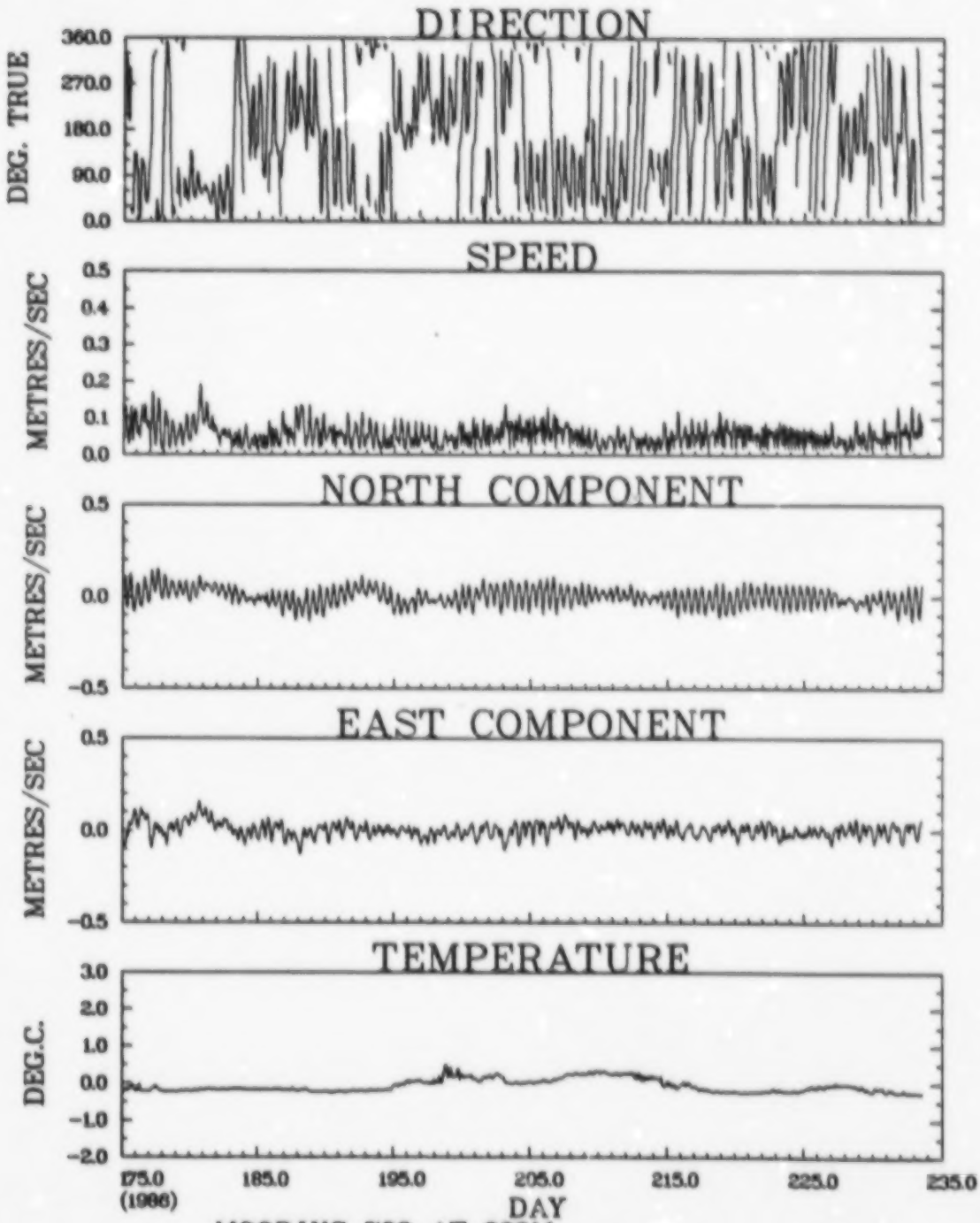
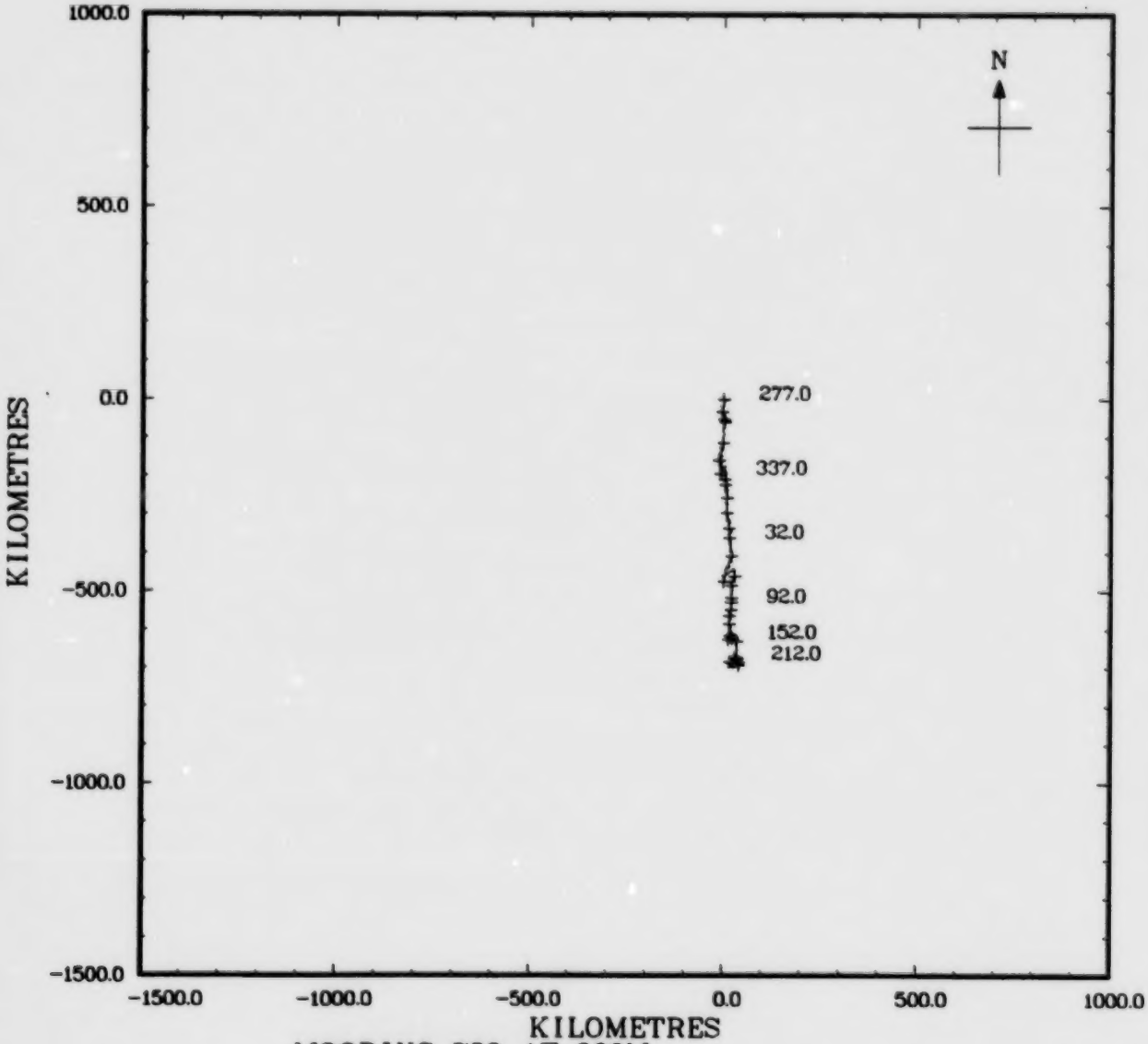
NORTHERN BAFFIN BAY 1985/6



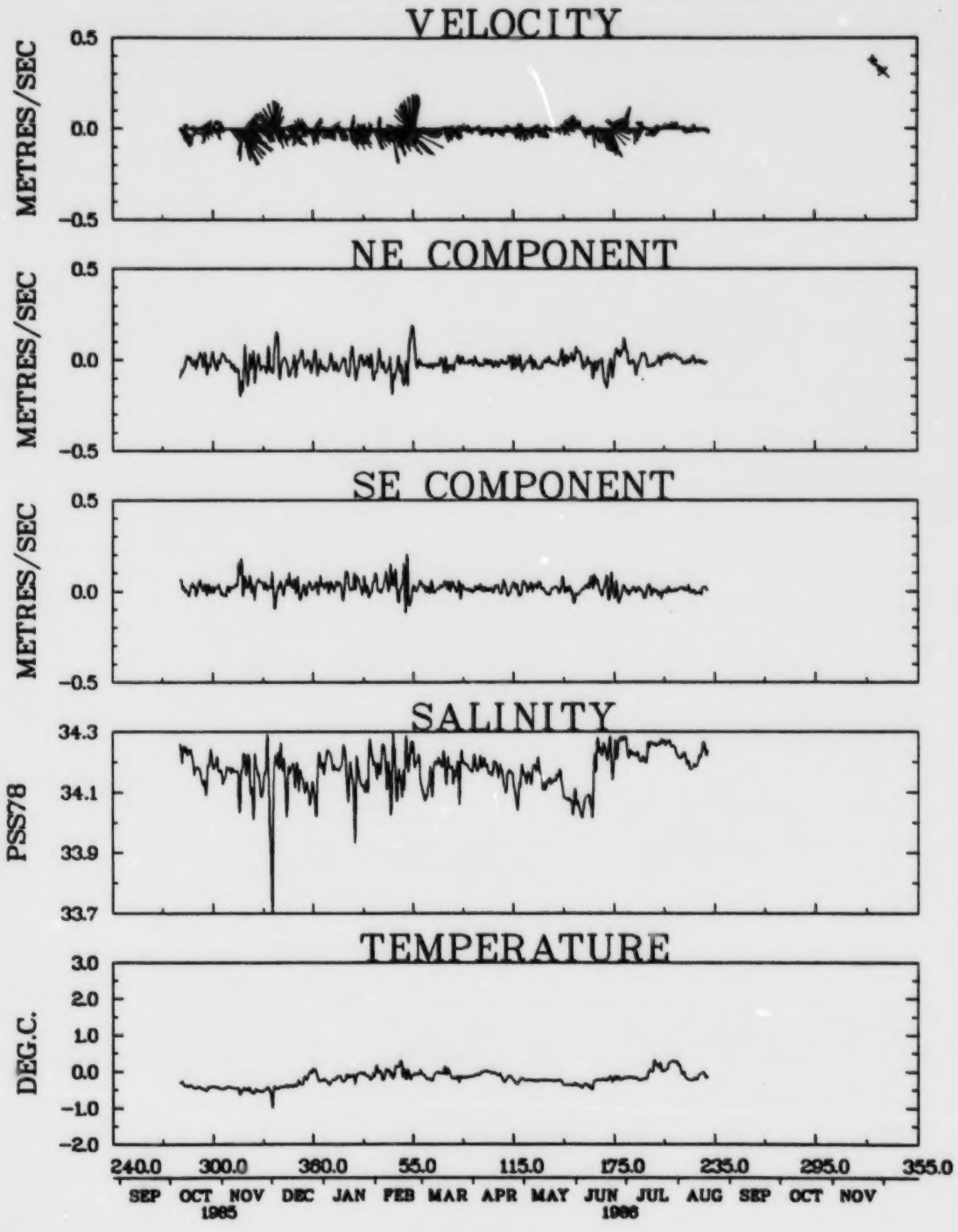

MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6



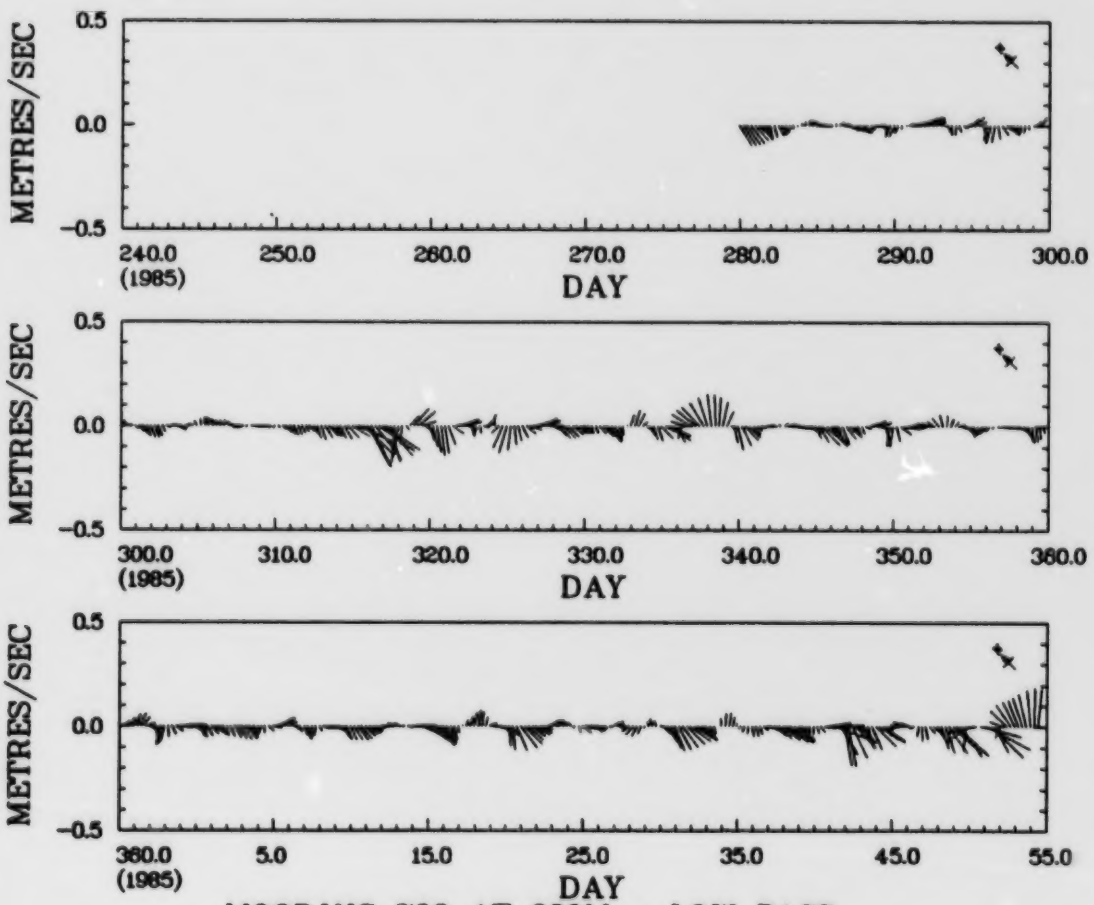

MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6



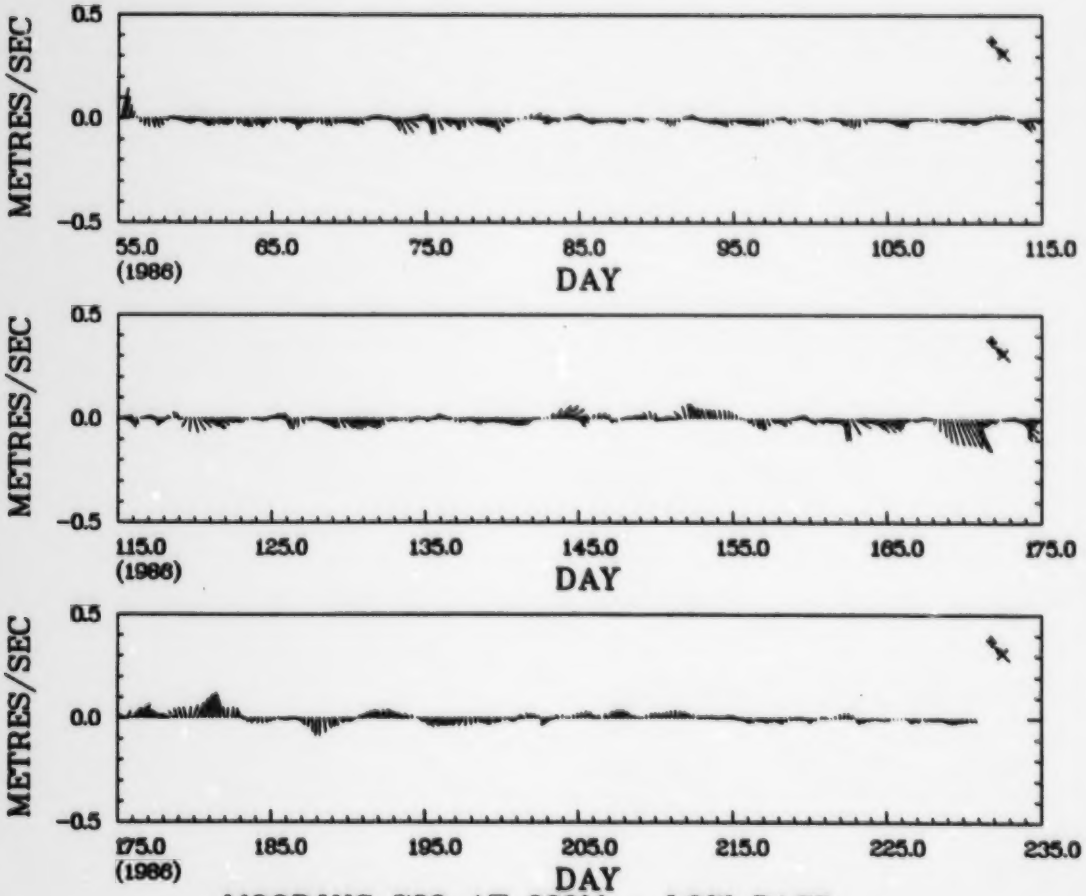

MOORING 702 AT 292M
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 292M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 702 AT 292M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



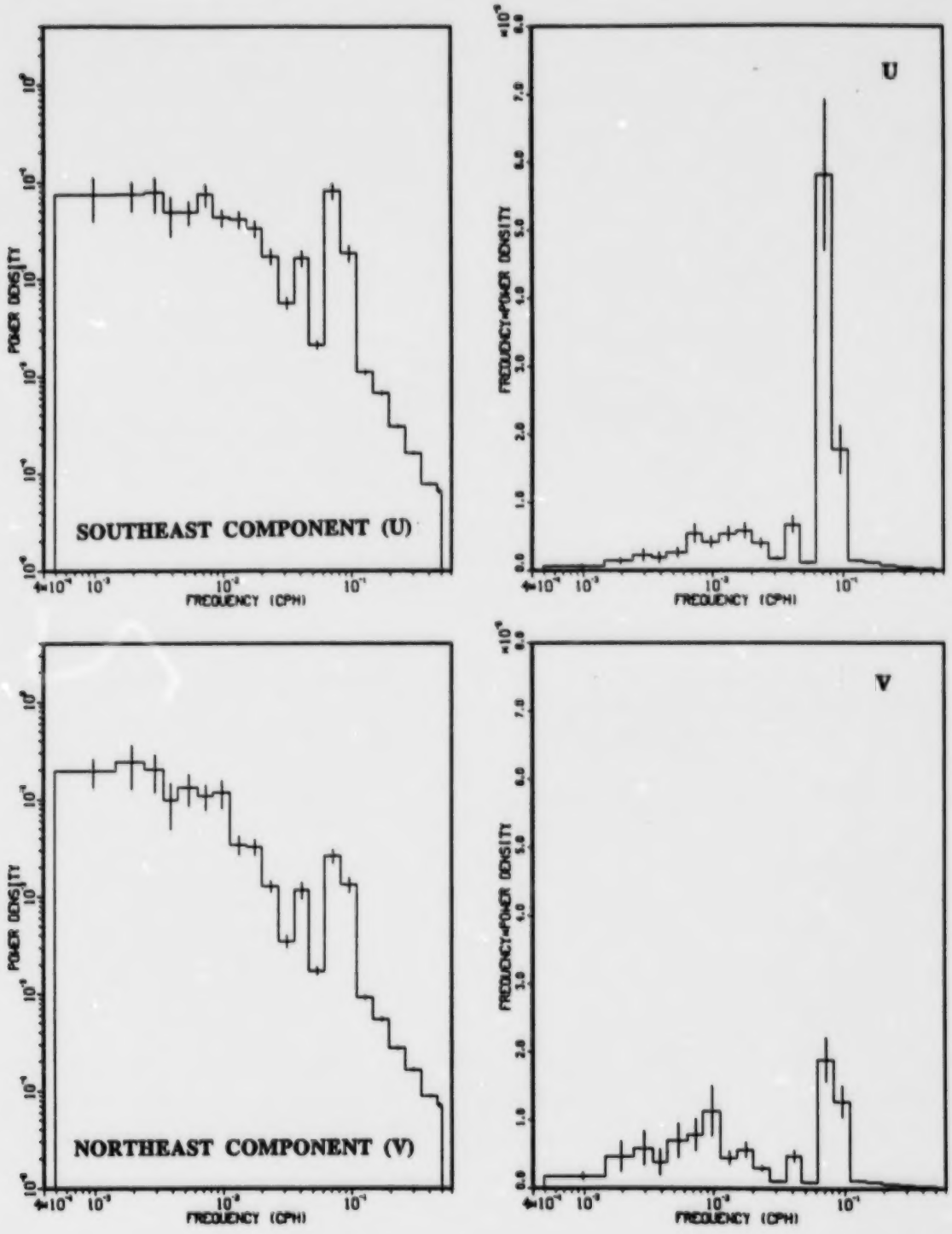

MOORING 702 AT 292M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 702**
**Depth 292 m**

**Tidal Analysis**

**321.8 d centred at day 072,1986**

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .016 | .004 | 96 | 72 | C | .004 | 320 | .016 | 70 |
| O1 | .009 | .005 | 93 | 14 | C | .005 | 278 | .009 | 12 |
| P1 | .005 | .002 | 105 | 82 | C | .002 | 315 | .005 | 77 |
| M2 | .062 | .014 | 340 | 30 | A | .059 | 26 | .025 | 243 |
| S2 | .030 | .005 | 353 | 61 | A | .030 | 60 | .006 | 291 |
| N2 | .011 | .004 | 345 | 356 | A | .011 | 351 | .005 | 228 |
| K2 | .010 | .000 | 353 | 61 | C | .010 | 61 | .001 | 227 |
| MF | .010 | .001 | 17 | 307 | C | .009 | 306 | .003 | 317 |
| M4 | .001 | .000 | 351 | 235 | C | .001 | 238 | .000 | 350 |
| MS4 | .001 | .000 | 348 | 221 | C | .001 | 223 | .000 | 357 |




MOORING 702 AT 292M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 174 m**

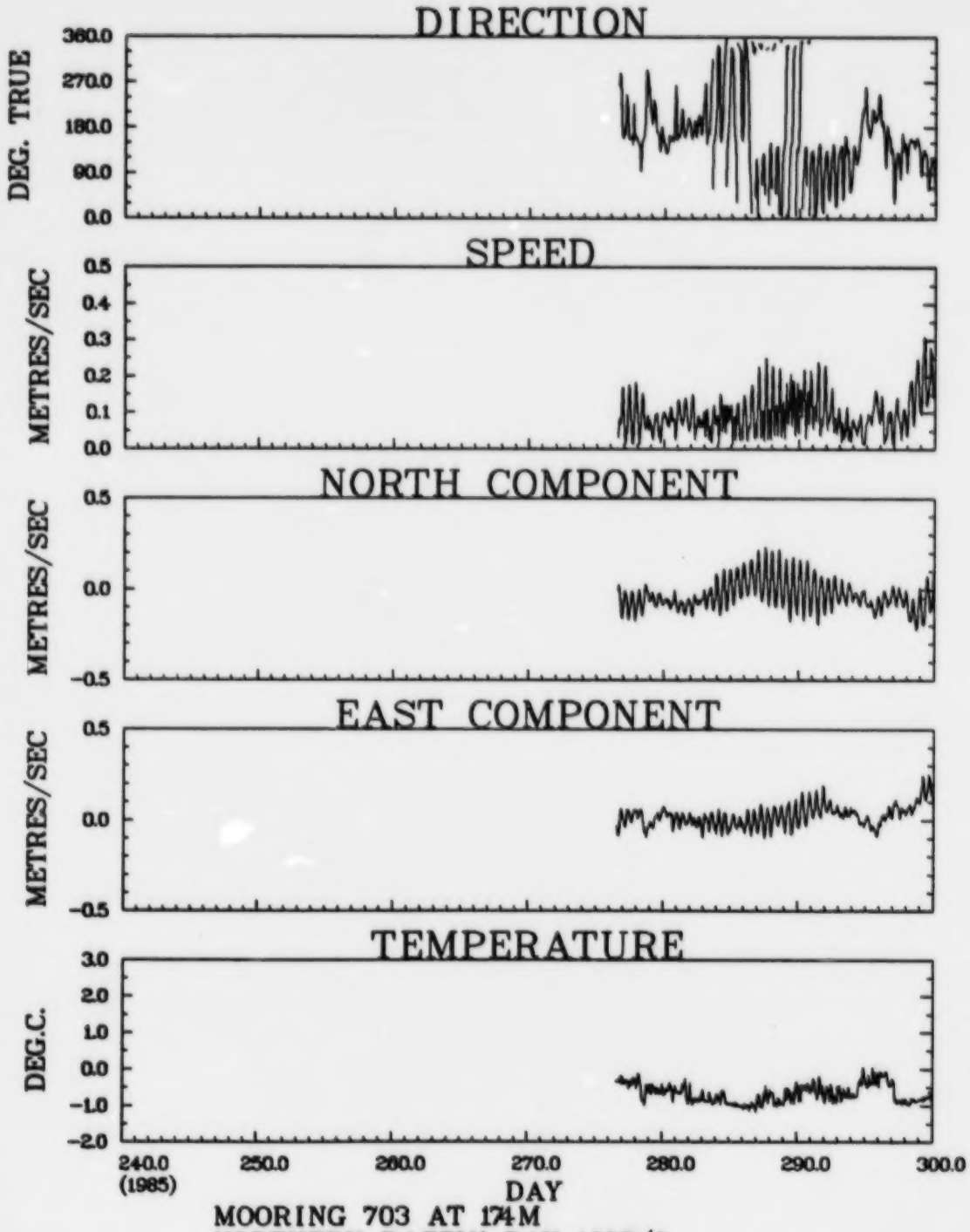
| | | | |
|---|---|---|---|
| Latitude | 76° 29.2N | Deployment | 1220Z 3 Oct., 1985 |
| Longitude | 73° 37.2W | Recovery | 0005Z 22 Aug., 1986 |
| Water Depth | 546 m | Duration | 322 d |

**RECORD LENGTH STATISTICS**

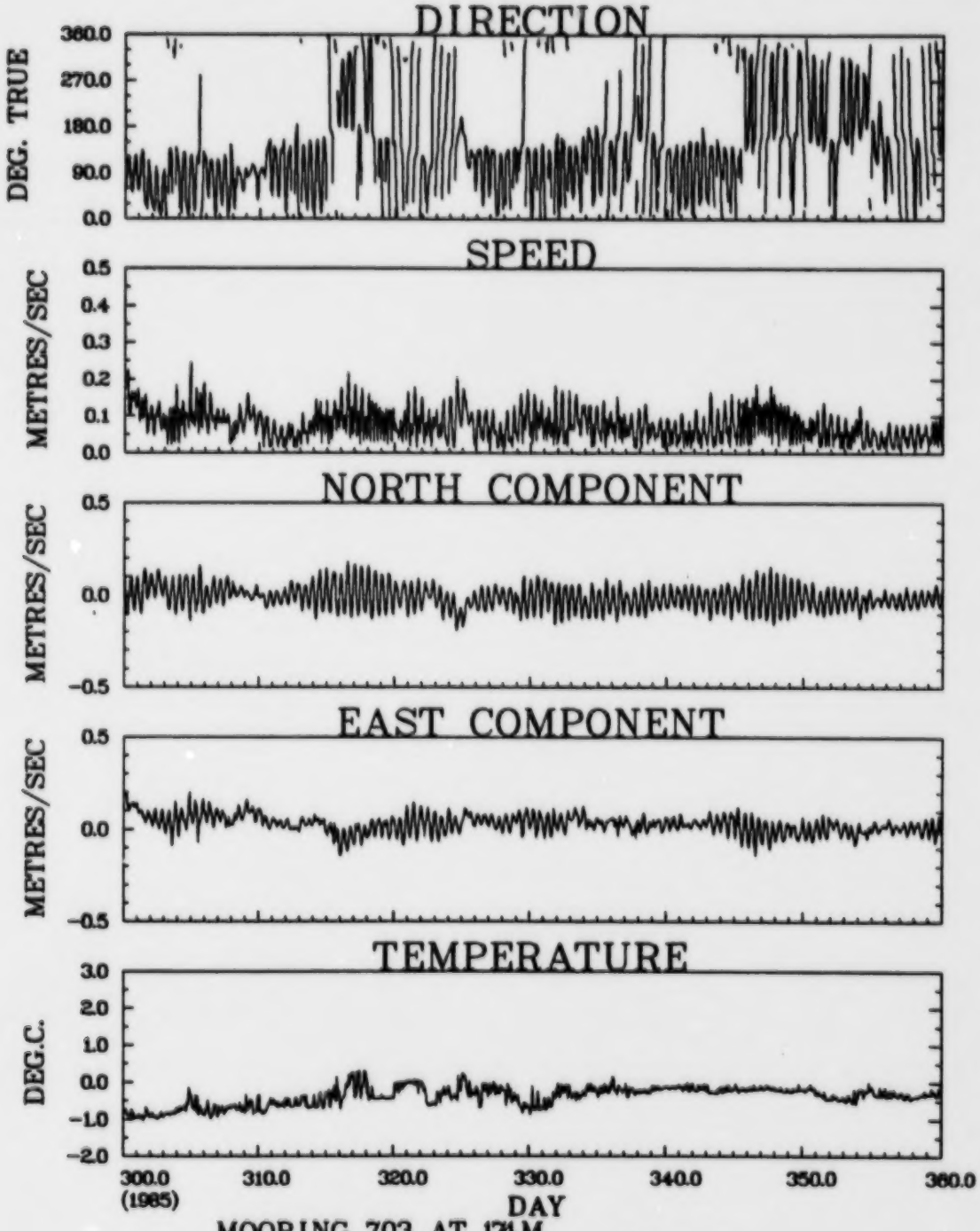
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7738 | 168 | 173 | 170 | 0.5 |
| Temperature (T) | °C | 7738 | -1.68 | 0.65 | -0.41 | 0.40 |
| Salinity (S) | PSS78 | 7735 | 33.62 | 34.21 | 33.94 | 0.10 |
| Speed (R) | $m.s^{-1}$ | 7738 | 0.015 | 0.402 | 0.087 | 0.050 |
| Northeast Component (V) | $m.s^{-1}$ | 7738 | -.188 | 0.207 | -.001 | 0.045 |
| Southeast Component (U) | $m.s^{-1}$ | 7738 | -.233 | 0.355 | 0.032 | 0.084 |

**MONTHLY MEANS**

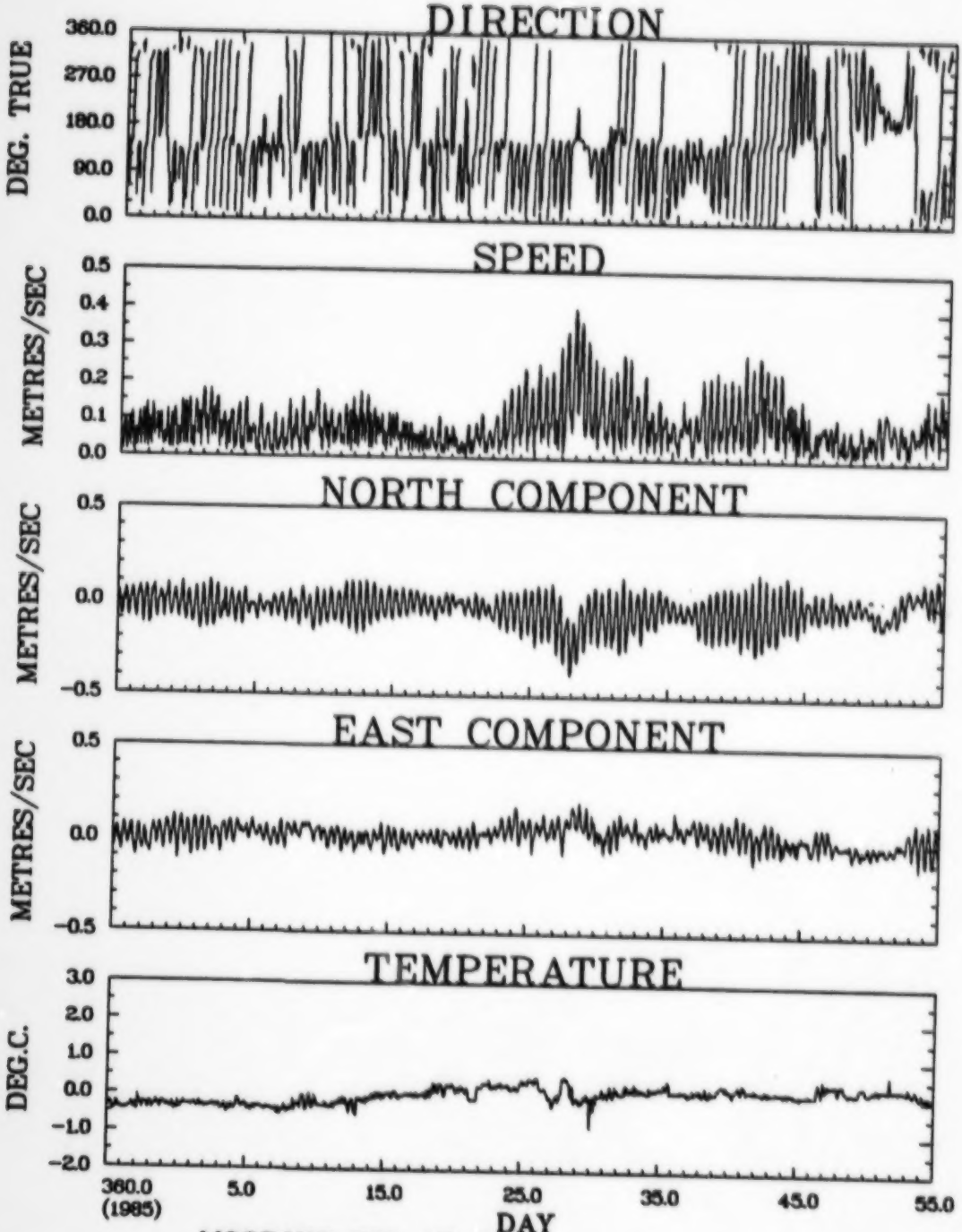
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 682 | -0.70±0.24 | 33.87±0.05 | 0.099±.052 | 0.007±.059 | 0.039±.086 |
| November | 720 | -0.42±0.27 | 33.93±0.06 | 0.083±.040 | 0.019±.043 | 0.032±.073 |
| December | 744 | -0.26±0.11 | 33.98±0.04 | 0.068±.036 | -.003±.032 | 0.023±.067 |
| January | 744 | -0.04±0.26 | 34.01±0.07 | 0.090±.066 | -.004±.045 | 0.054±.086 |
| February | 672 | 0.19±0.10 | 34.09±0.04 | 0.098±.055 | -.009±.055 | 0.026±.094 |
| March | 744 | -0.29±0.24 | 33.96±0.05 | 0.095±.054 | -.001±.042 | 0.039±.093 |
| April | 720 | -0.54±0.26 | 33.92±0.04 | 0.088±.047 | 0.007±.038 | 0.041±.083 |
| May | 744 | -0.44±0.24 | 33.94±0.05 | 0.075±.037 | 0.004±.037 | 0.016±.073 |
| June | 720 | -0.54±0.37 | 33.94±0.07 | 0.095±.056 | -.001±.046 | 0.051±.086 |
| July | 744 | -0.67±0.43 | 33.86±0.09 | 0.083±.043 | -.018±.039 | 0.017±.081 |
| August | 504 | -1.01±0.13 | 33.74±0.04 | 0.085±.038 | -.011±.042 | 0.002±.082 |



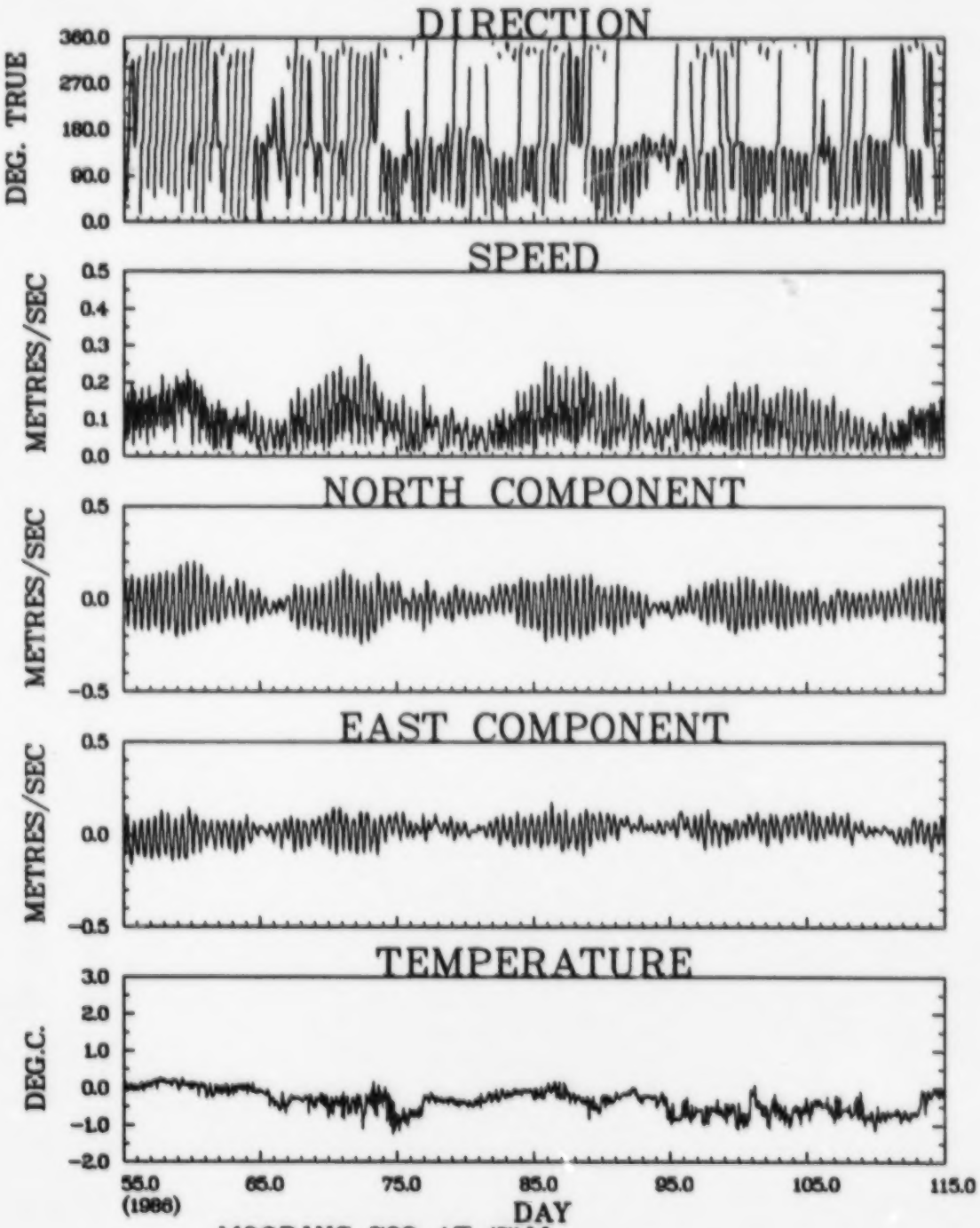

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6



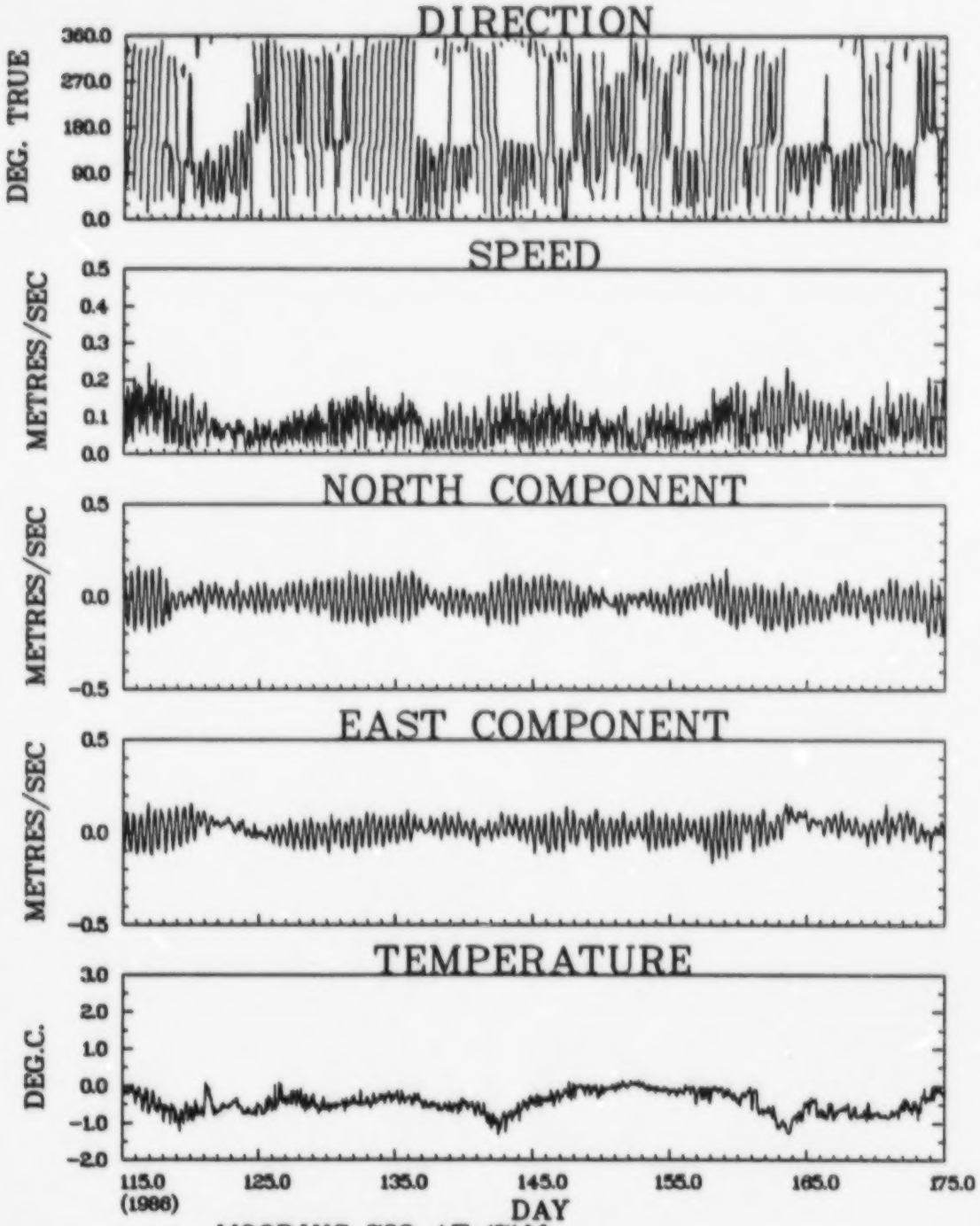

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6



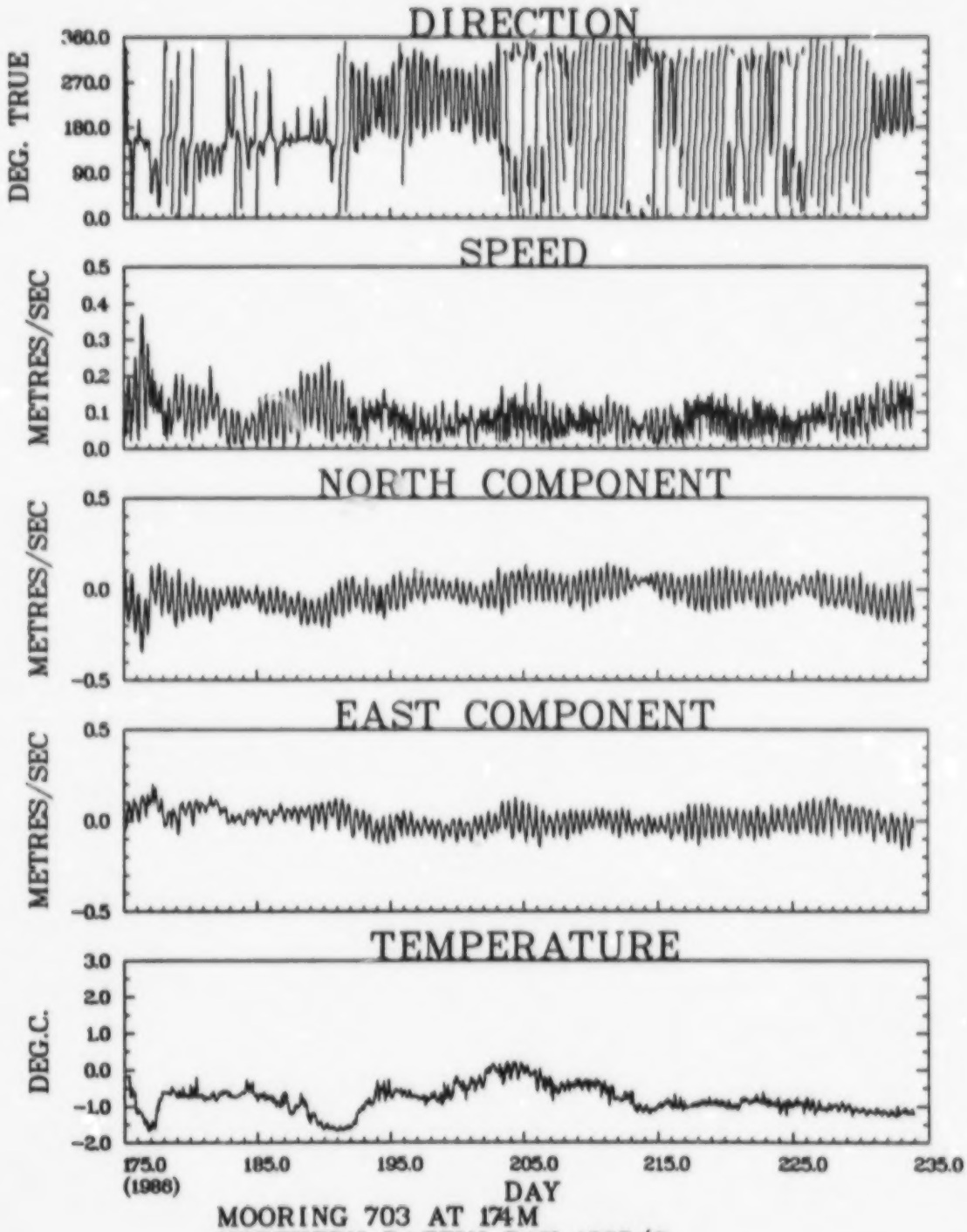

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6



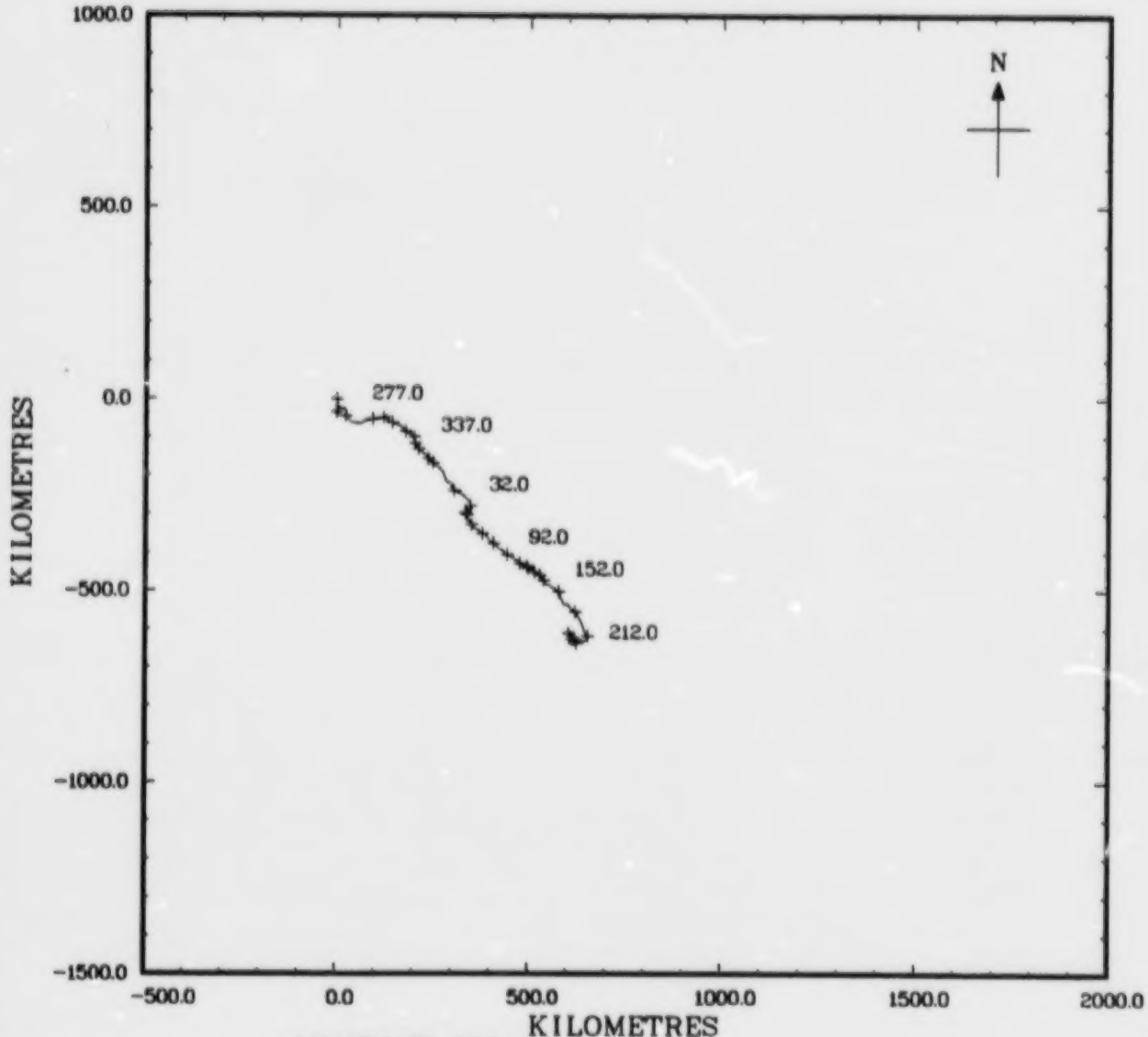

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6



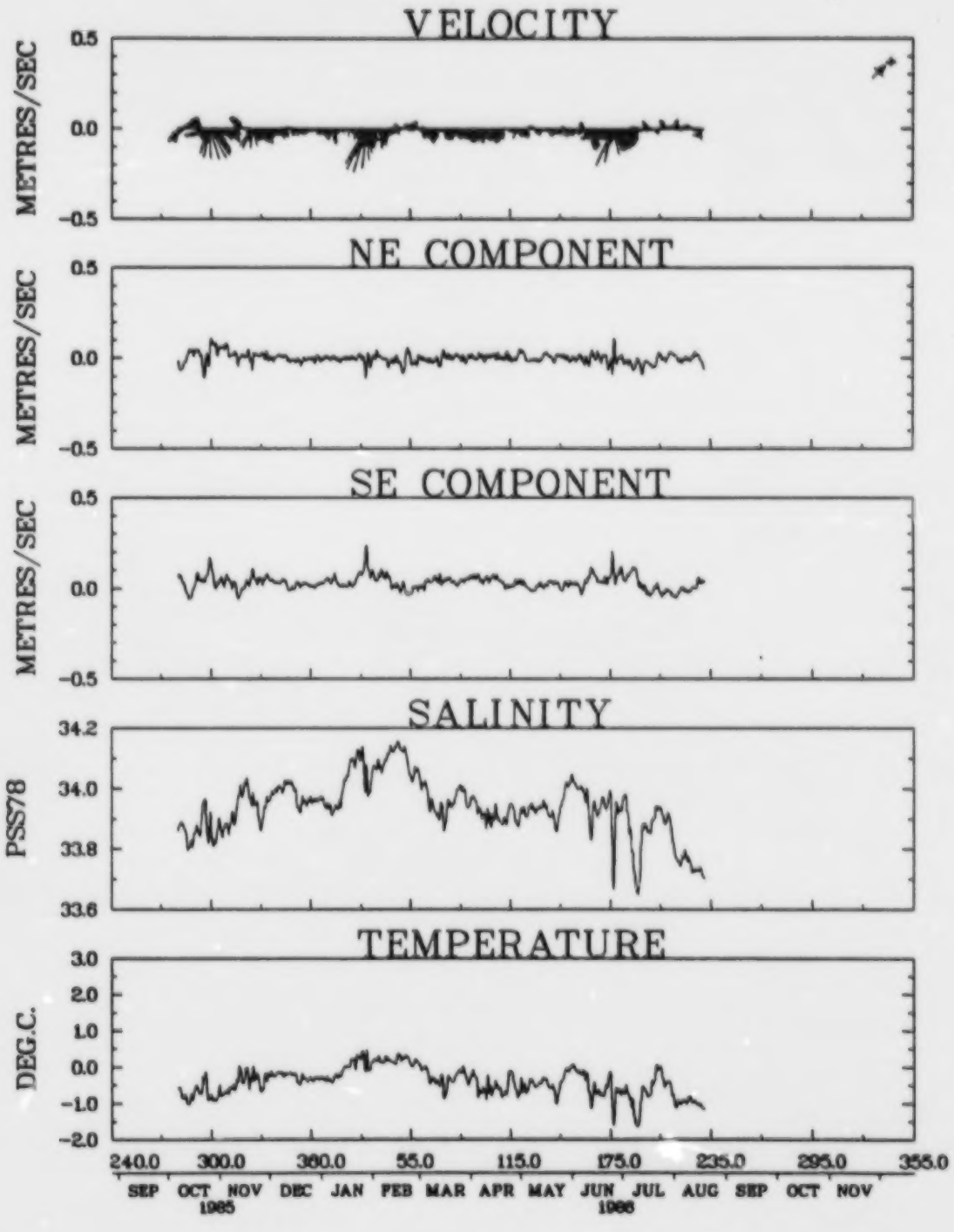

MOORING 703 AT 174 M
NORTHERN BAFFIN BAY 1985/6



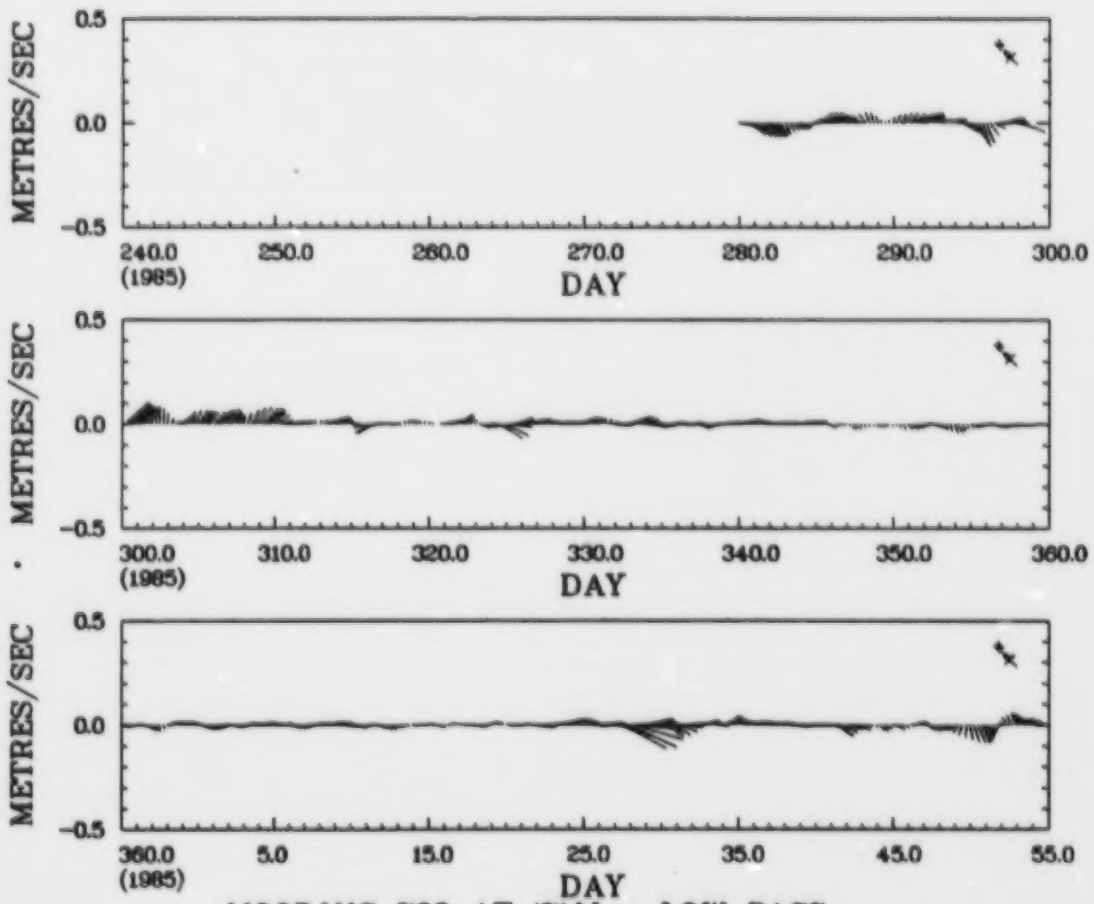

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6



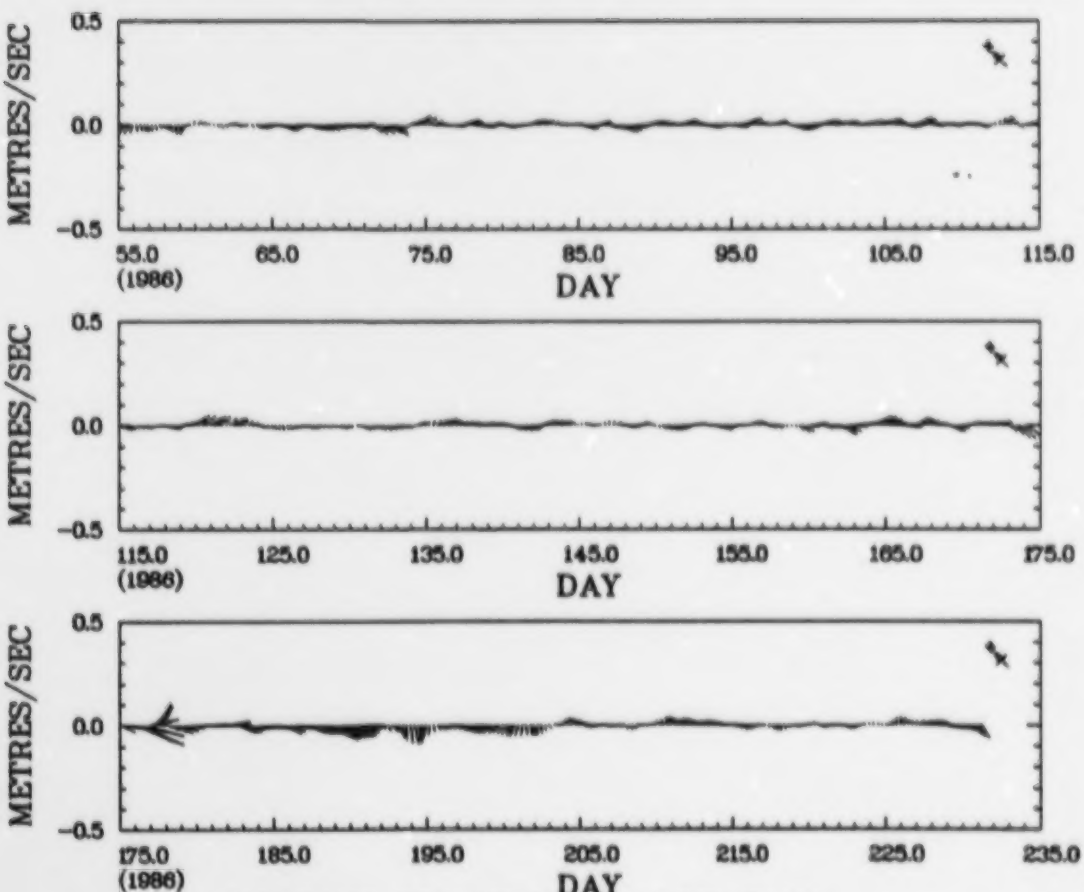

MOORING 703 AT 174M
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 174M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 174M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



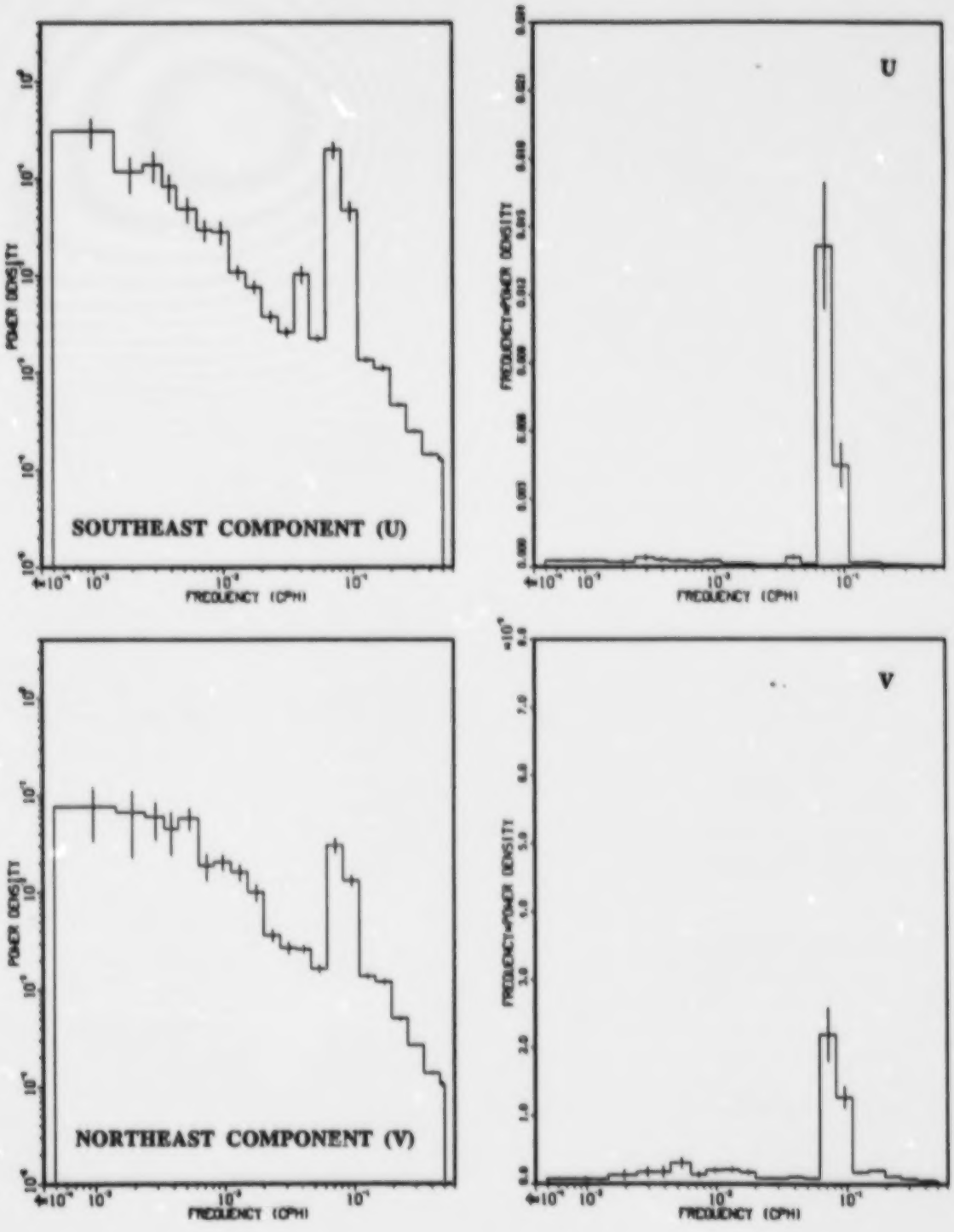

MOORING 703 AT 174M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 174 m**

**Tidal Analysis**

322.4 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | | Northeast Comp Amp. (m/s) | Phase (deg) | Southeast Comp Amp. (m/s) | Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|---|
| K1 | .011 | .000 | 122 | 35 | A | | .006 | 213 | .009 | 36 |
| O1 | .004 | .001 | 106 | 343 | C | | .002 | 212 | .004 | 338 |
| P1 | .004 | .000 | 114 | 34 | C | | .002 | 218 | .004 | 33 |
| M2 | .092 | .002 | 332 | 23 | C | | .081 | 24 | .043 | 201 |
| S2 | .043 | .004 | 324 | 73 | C | | .035 | 76 | .025 | 245 |
| N2 | .018 | .001 | 318 | 11 | C | | .014 | 15 | .012 | 187 |
| K2 | .012 | .001 | 337 | 56 | C | | .011 | 58 | .005 | 230 |
| MF | .009 | .001 | 341 | 83 | C | | .009 | 85 | .003 | 253 |
| M4 | .001 | .001 | 49 | 301 | C | | .001 | 266 | .001 | 329 |
| MS4 | .002 | .001 | 348 | 280 | C | | .002 | 287 | .001 | 31 |




MOORING 703 AT 174M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 324 m**

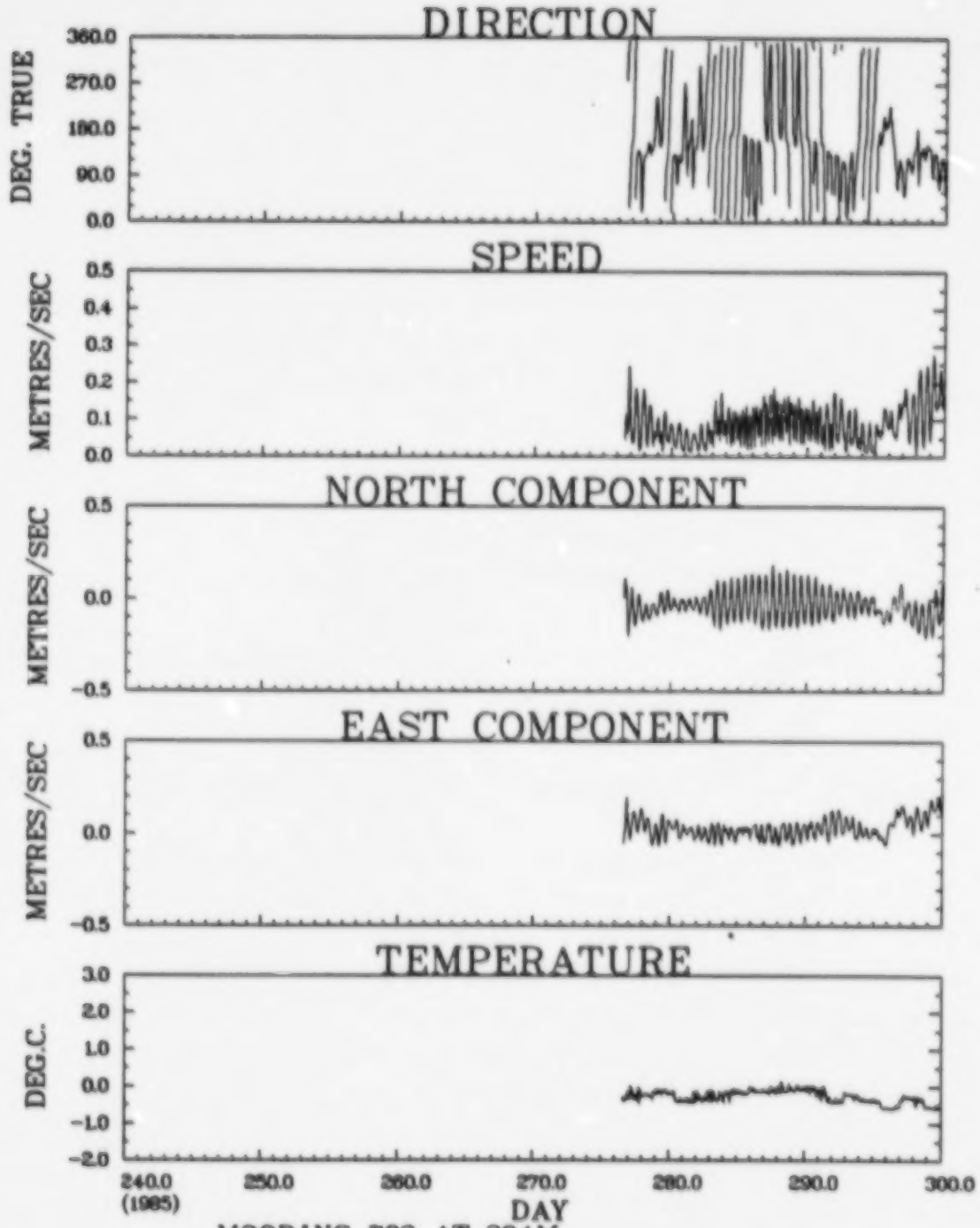
| | | | |
|---|---|---|---|
| Latitude | 76° 29.2N | Deployment | 1220Z 3 Oct., 1985 |
| Longitude | 73° 37.2W | Recovery | 0005Z 22 Aug., 1986 |
| Water Depth | 546 m | Duration | 322 d |

**RECORD LENGTH STATISTICS**

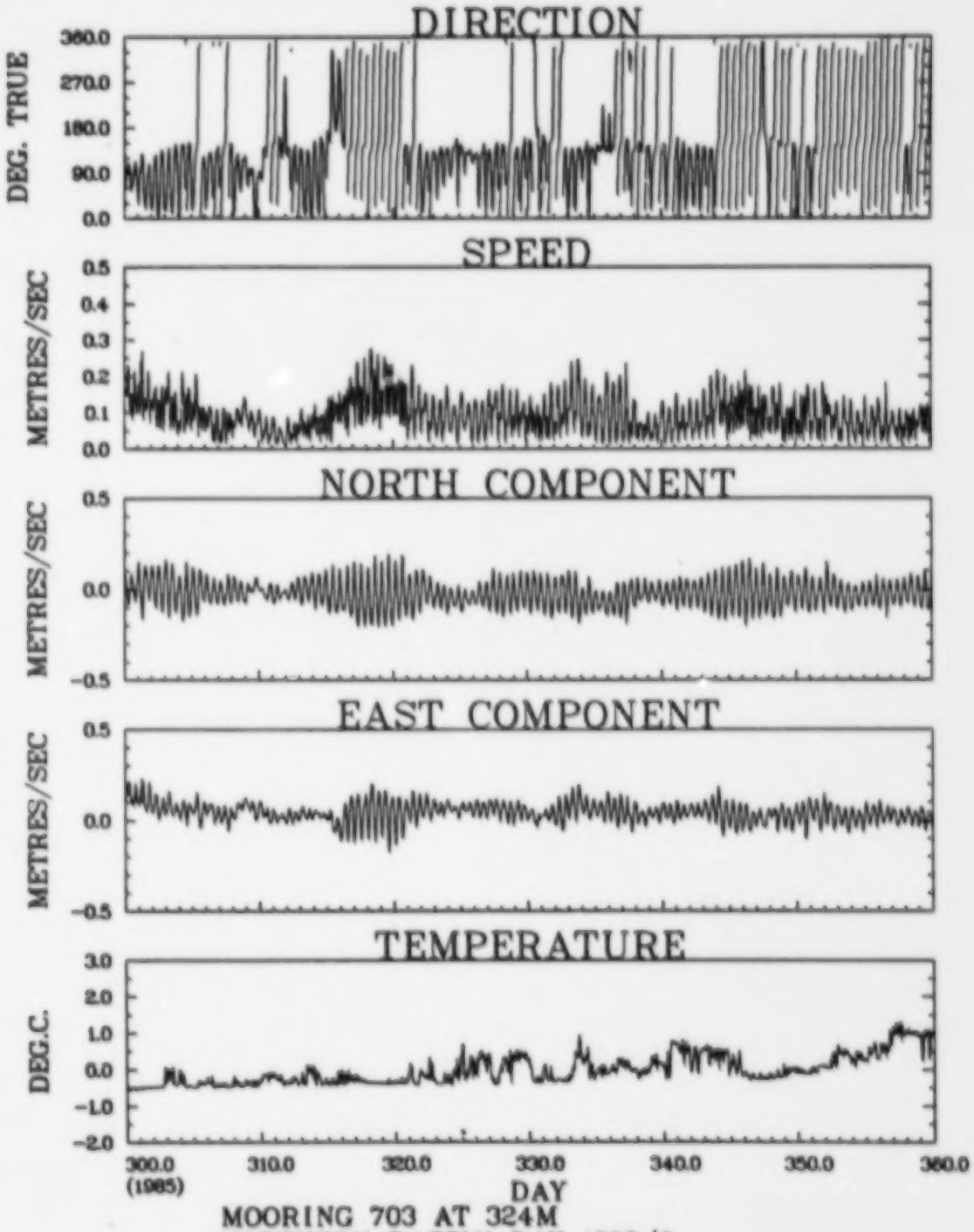
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7738 | 309 | 334 | 322 | 2.8 |
| Temperature (T) | °C | 7737 | -0.60 | 1.67 | 0.12 | 0.34 |
| Salinity (S) | PSS78 | 7733 | 34.00 | 34.45 | 34.21 | 0.06 |
| Speed (R) | $m.s^{-1}$ | 7738 | 0.015 | 0.399 | 0.089 | 0.050 |
| Northeast Component (V) | $m.s^{-1}$ | 7738 | -.162 | 0.216 | 0.008 | 0.042 |
| Southeast Component (U) | $m.s^{-1}$ | 7738 | -.234 | 0.388 | 0.042 | 0.083 |

**MONTHLY MEANS**

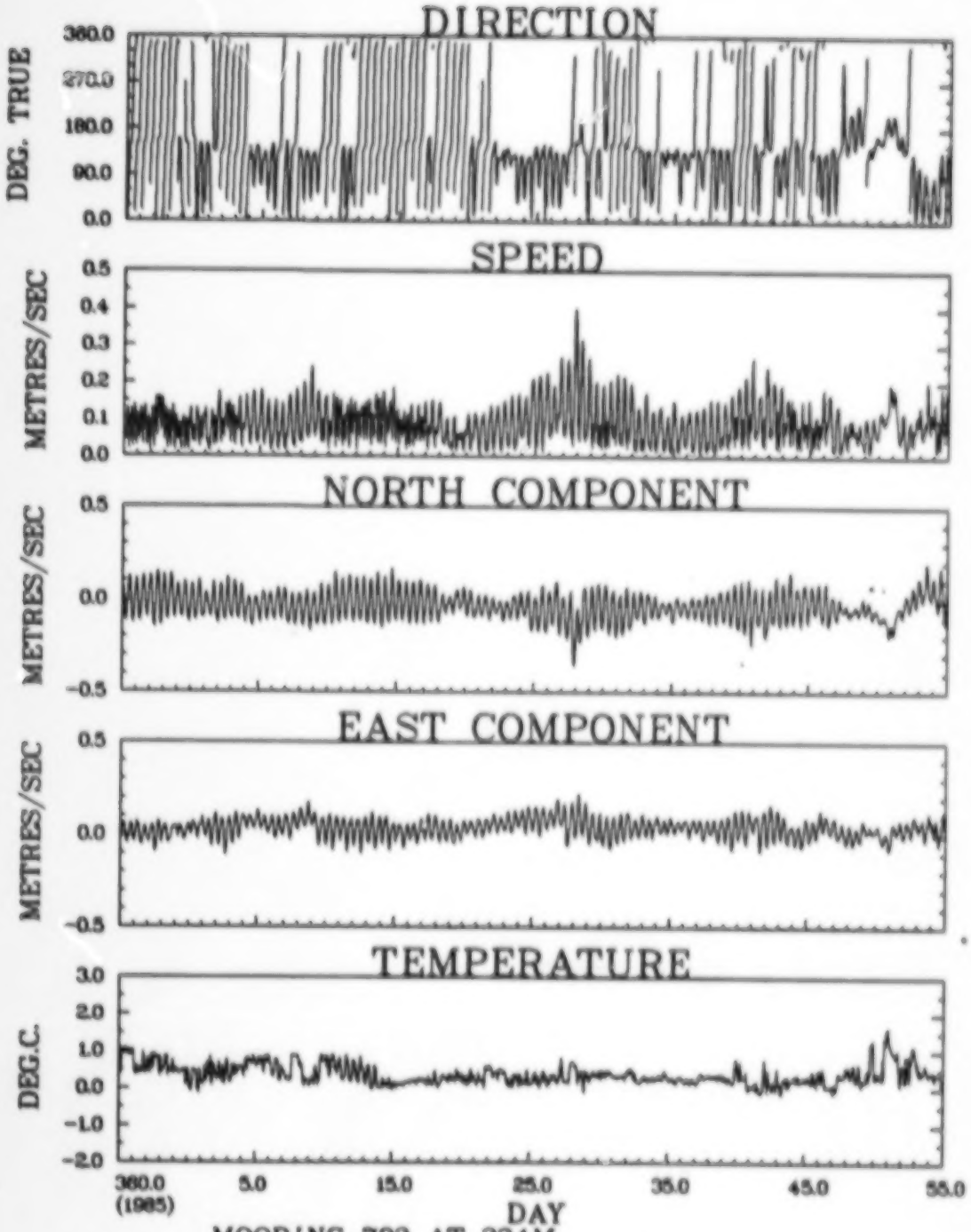
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 682 | -0.29±0.17 | 34.19±0.04 | 0.097±.052 | 0.012±.055 | 0.050±.080 |
| November | 720 | -0.19±0.26 | 34.22±0.04 | 0.096±.052 | 0.015±.042 | 0.049±.087 |
| December | 744 | 0.32±0.39 | 34.27±0.03 | 0.085±.045 | 0.005±.037 | 0.036±.081 |
| January | 744 | 0.37±0.23 | 34.27±0.04 | 0.098±.058 | 0.007±.035 | 0.058±.090 |
| February | 672 | 0.33±0.28 | 34.27±0.04 | 0.089±.048 | -.000±.044 | 0.046±.078 |
| March | 744 | 0.40±0.32 | 34.23±0.03 | 0.092±.050 | 0.009±.037 | 0.044±.088 |
| April | 720 | 0.06±0.17 | 34.17±0.02 | 0.095±.052 | 0.012±.034 | 0.053±.087 |
| May | 744 | 0.26±0.19 | 34.19±0.03 | 0.081±.043 | 0.007±.039 | 0.032±.077 |
| June | 720 | 0.05±0.31 | 34.19±0.04 | 0.092±.057 | 0.009±.037 | 0.055±.085 |
| July | 744 | -0.01±0.23 | 34.14±0.03 | 0.077±.046 | 0.014±.049 | 0.013±.073 |
| August | 504 | -0.05±0.18 | 34.09±0.03 | 0.075±.041 | 0.000±.048 | 0.026±.067 |



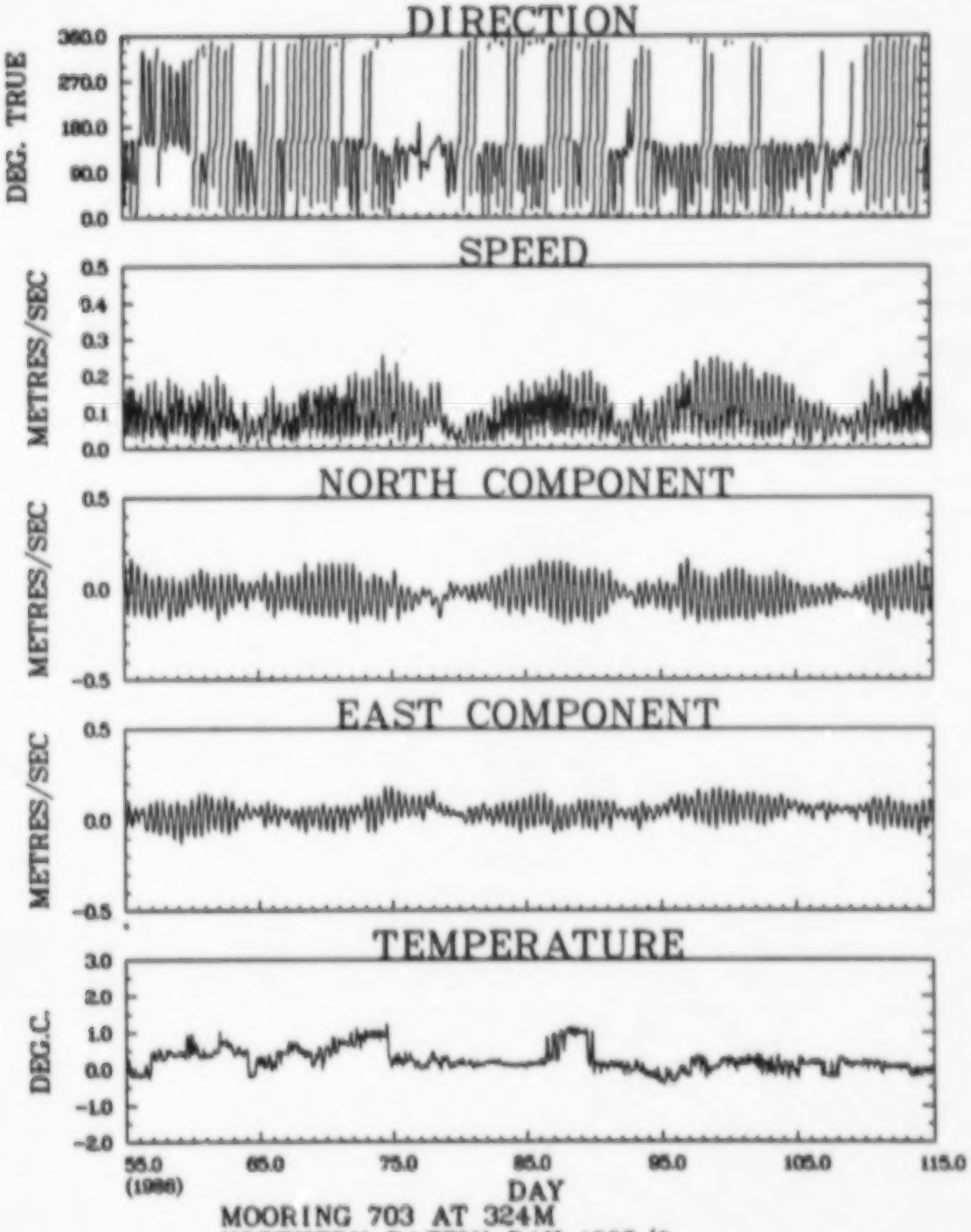

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



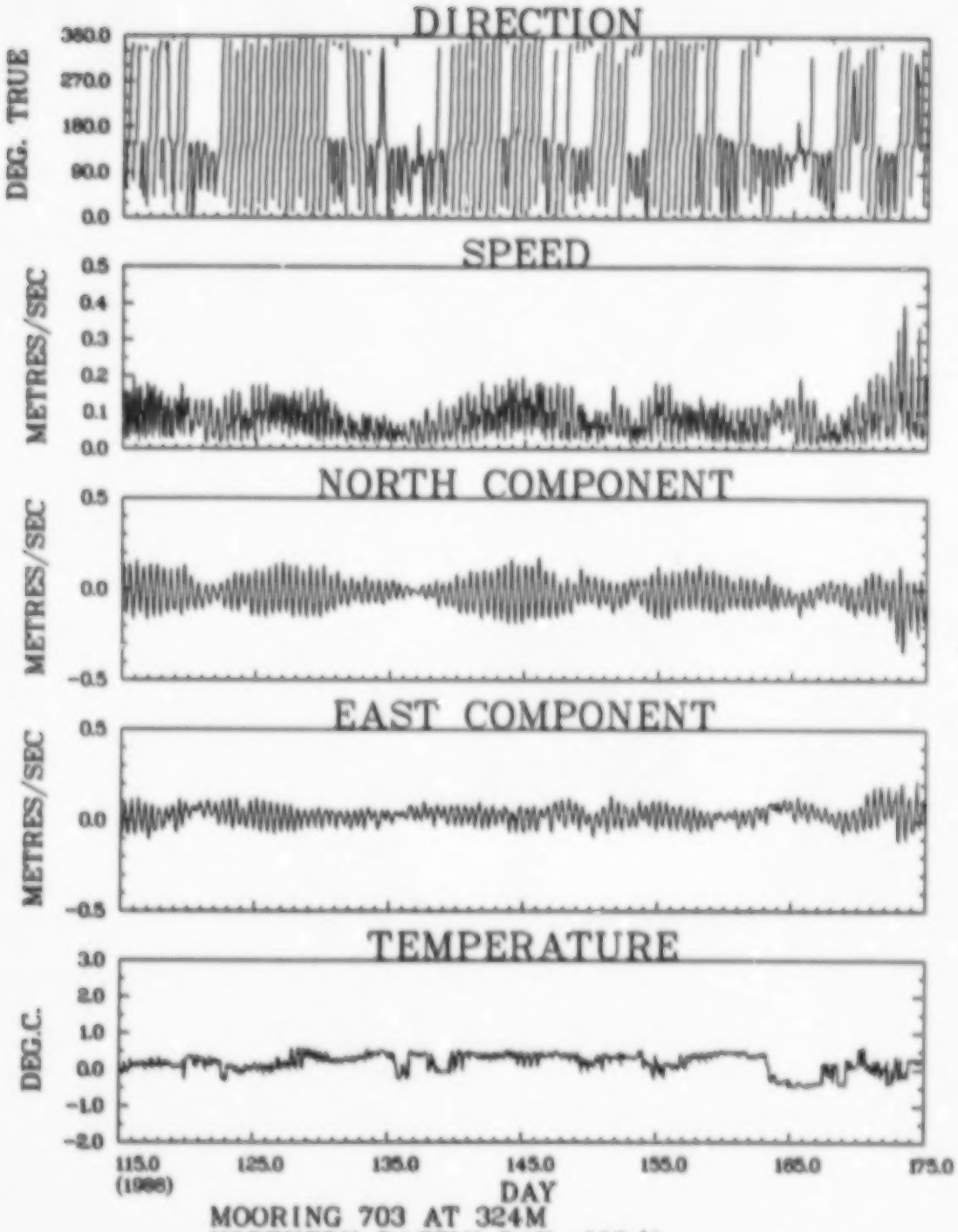

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



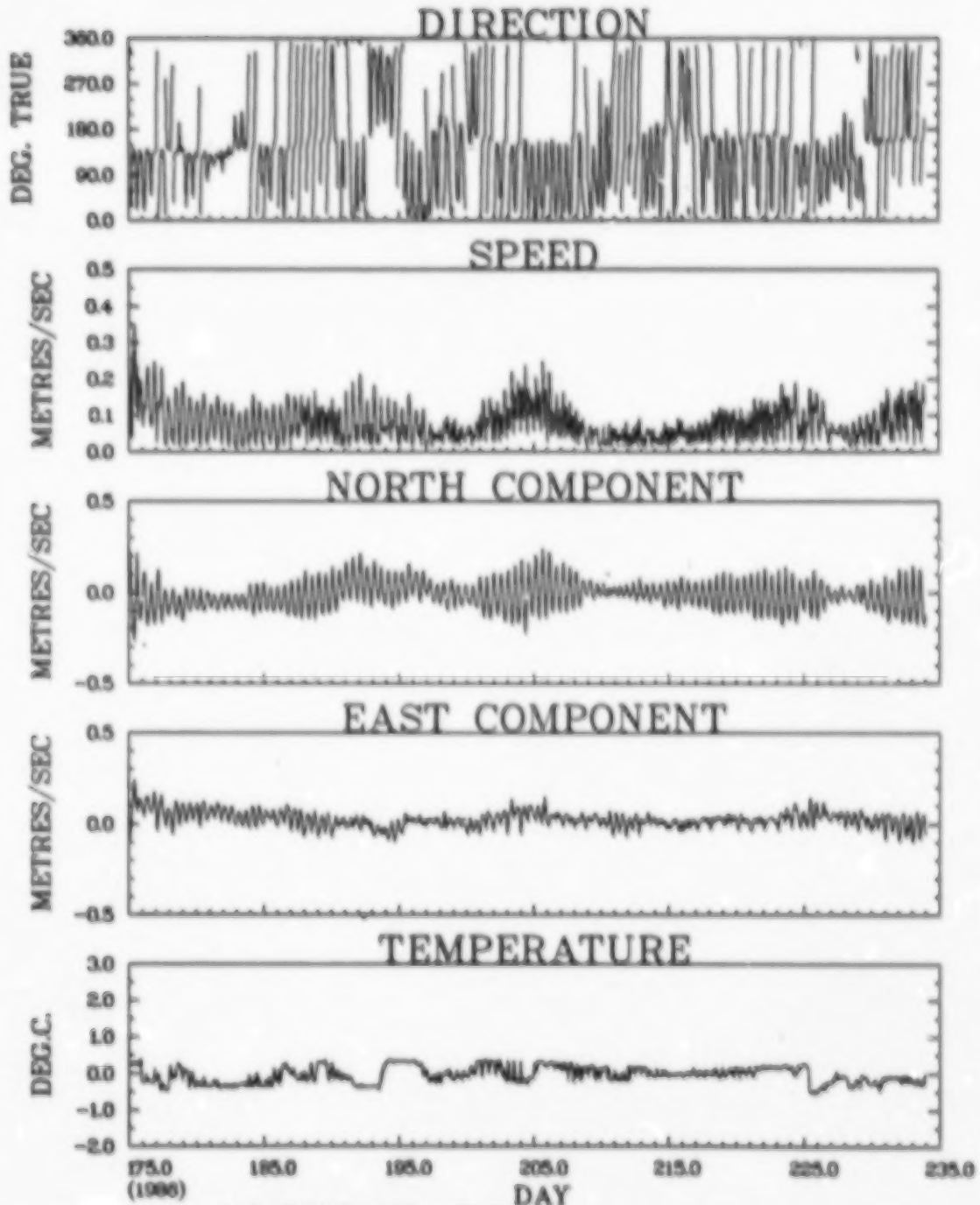

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



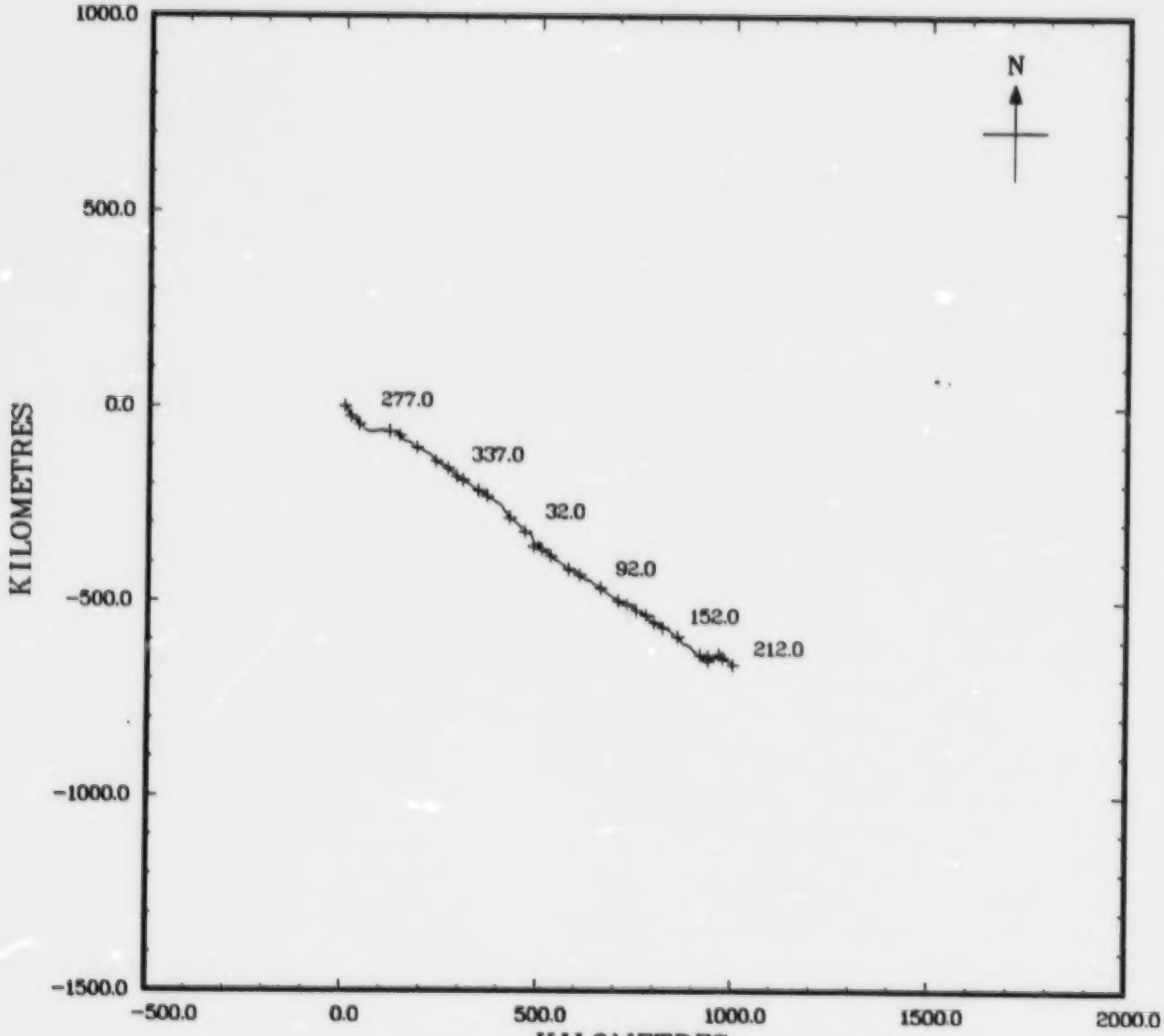

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



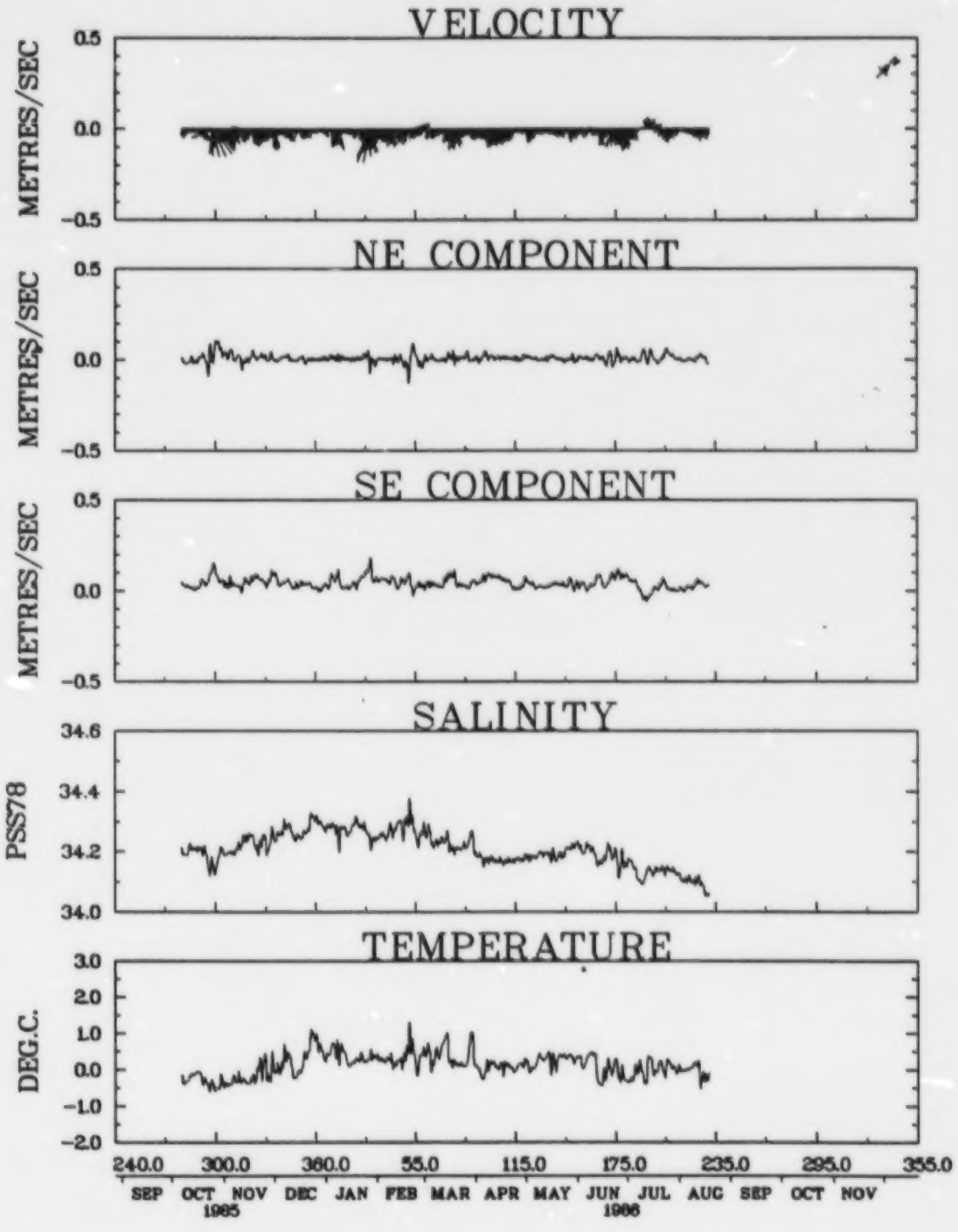

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



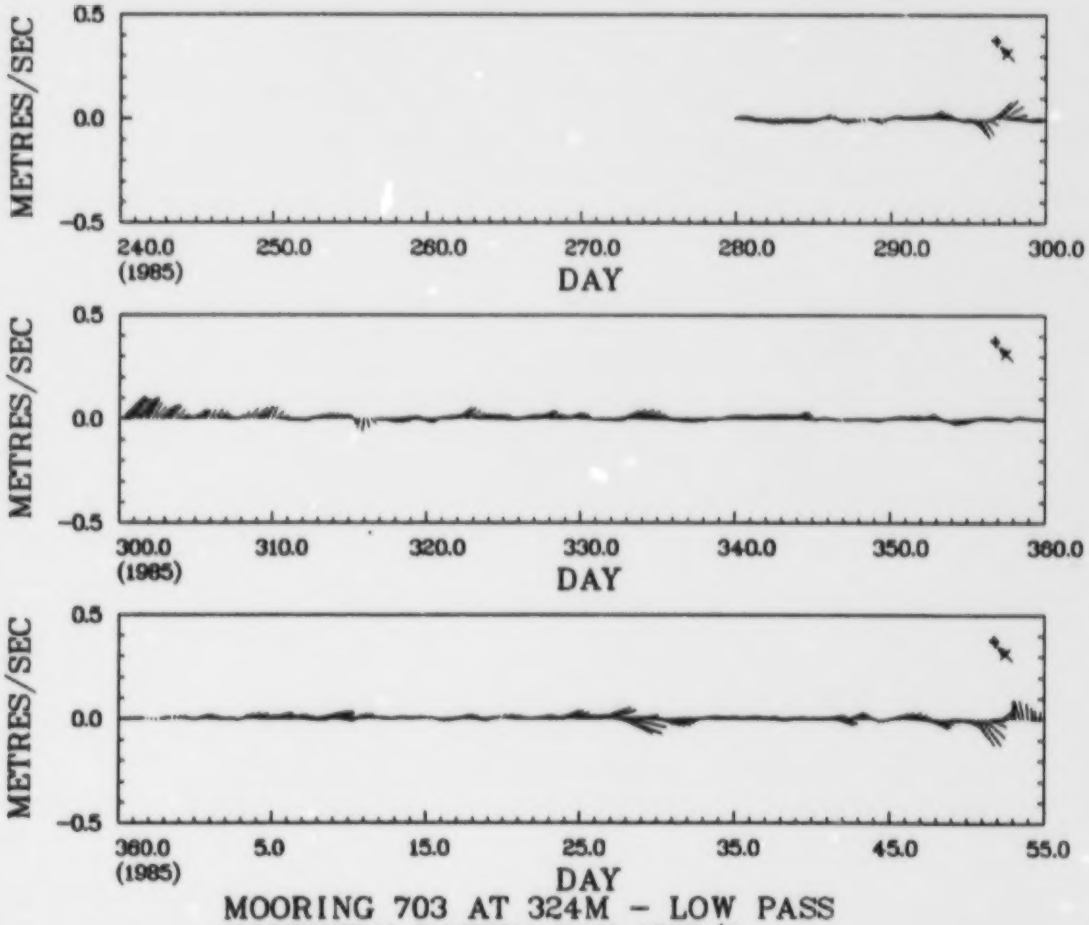

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6



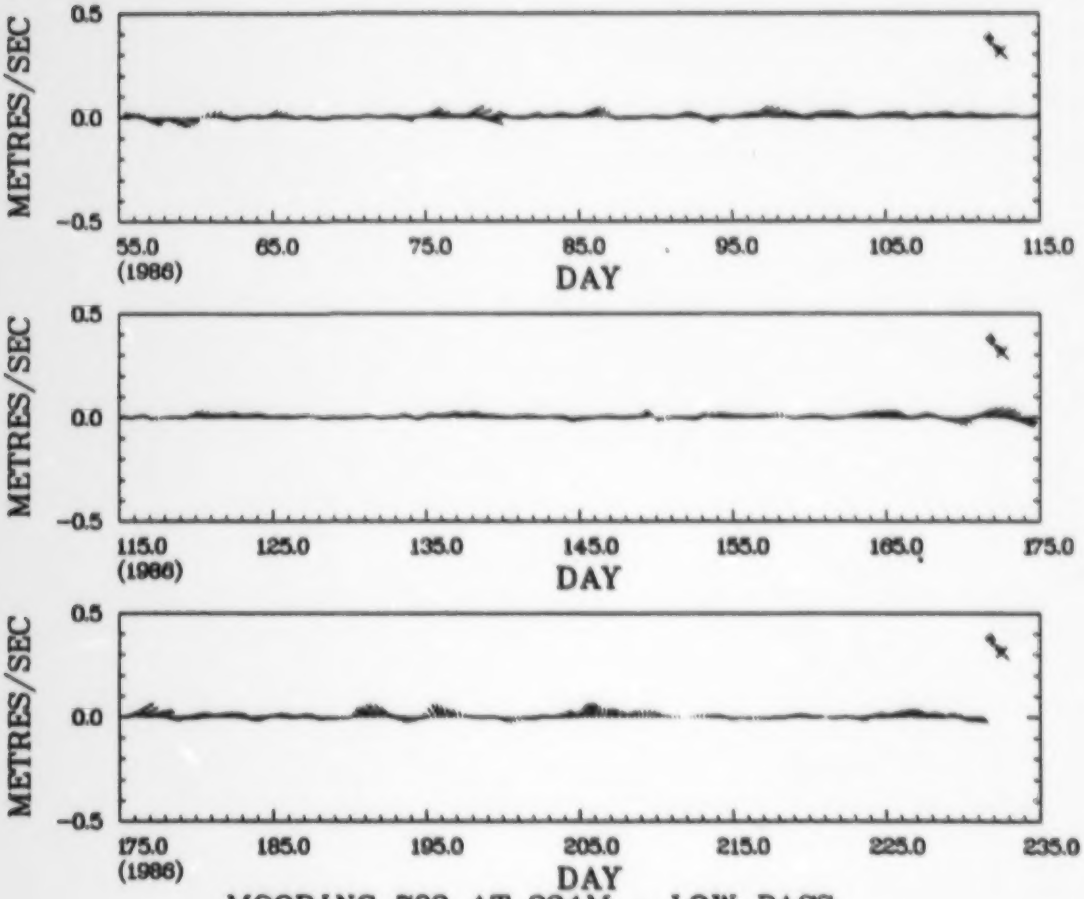

MOORING 703 AT 324M
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 324M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 324M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



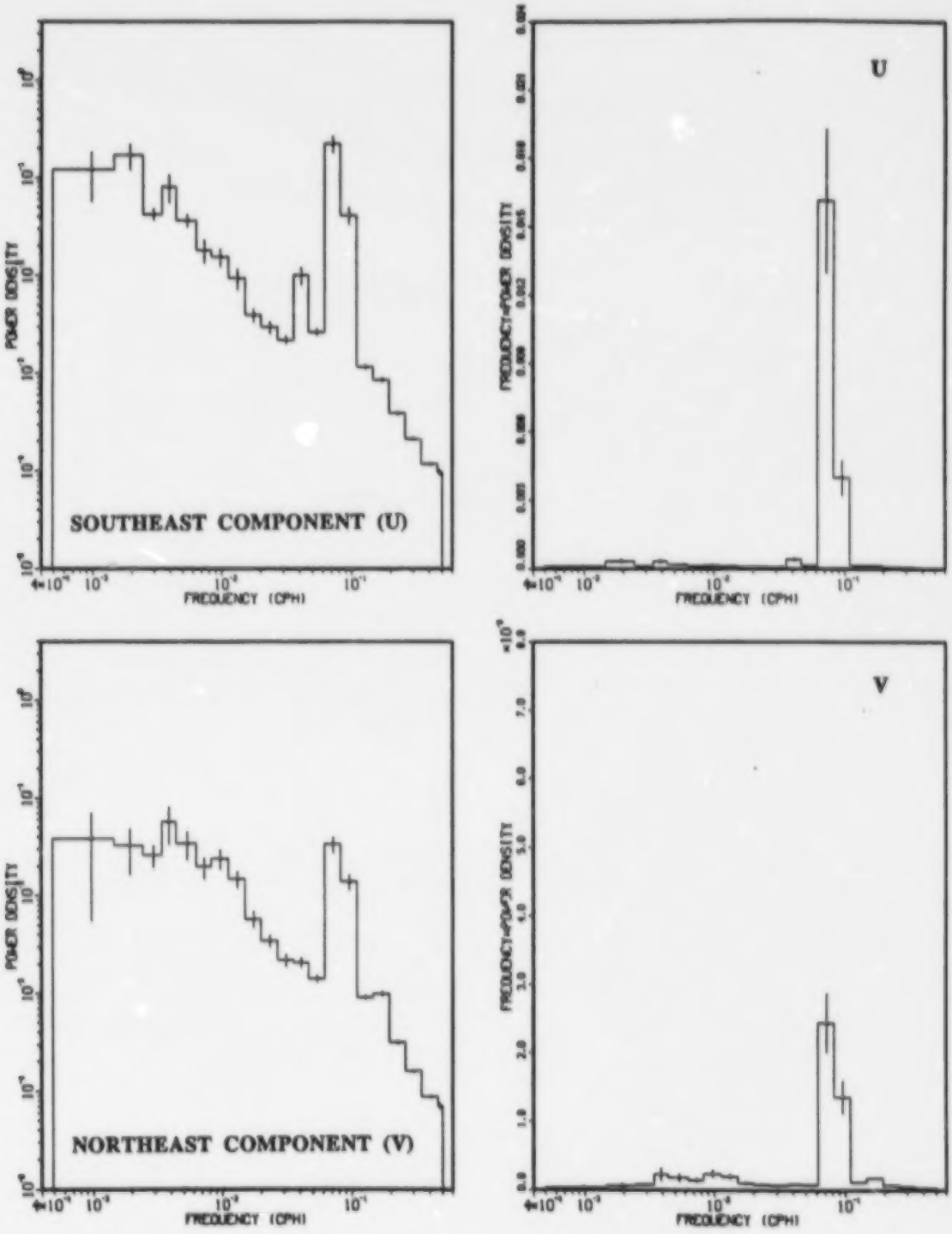

MOORING 703 AT 324M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 324 m**

**Tidal Analysis**

322.4 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | | Northeast Comp Amp. (m/s) | Northeast Comp Phase (deg) | Southeast Comp Amp. (m/s) | Southeast Comp Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|---|
| K1 | .011 | .000 | 124 | 33 | C | | .006 | 213 | .009 | 33 |
| O1 | .003 | .001 | 115 | 325 | C | | .001 | 163 | .003 | 321 |
| P1 | .003 | .001 | 125 | 26 | A | | .002 | 192 | .003 | 33 |
| M2 | .100 | .012 | 331 | 26 | C | | .088 | 30 | .049 | 193 |
| S2 | .041 | .002 | 339 | 59 | C | | .039 | 60 | .015 | 233 |
| N2 | .022 | .004 | 339 | 355 | C | | .020 | 359 | .009 | 148 |
| K2 | .012 | .000 | 329 | 64 | C | | .010 | 65 | .006 | 240 |
| MF | .003 | .001 | 353 | 10 | A | | .003 | 7 | .001 | 264 |
| M4 | .003 | .002 | 43 | 119 | C | | .002 | 86 | .002 | 157 |
| MS4 | .003 | .001 | 24 | 116 | C | | .003 | 104 | .002 | 162 |




MOORING 703 AT 324M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 531 m**

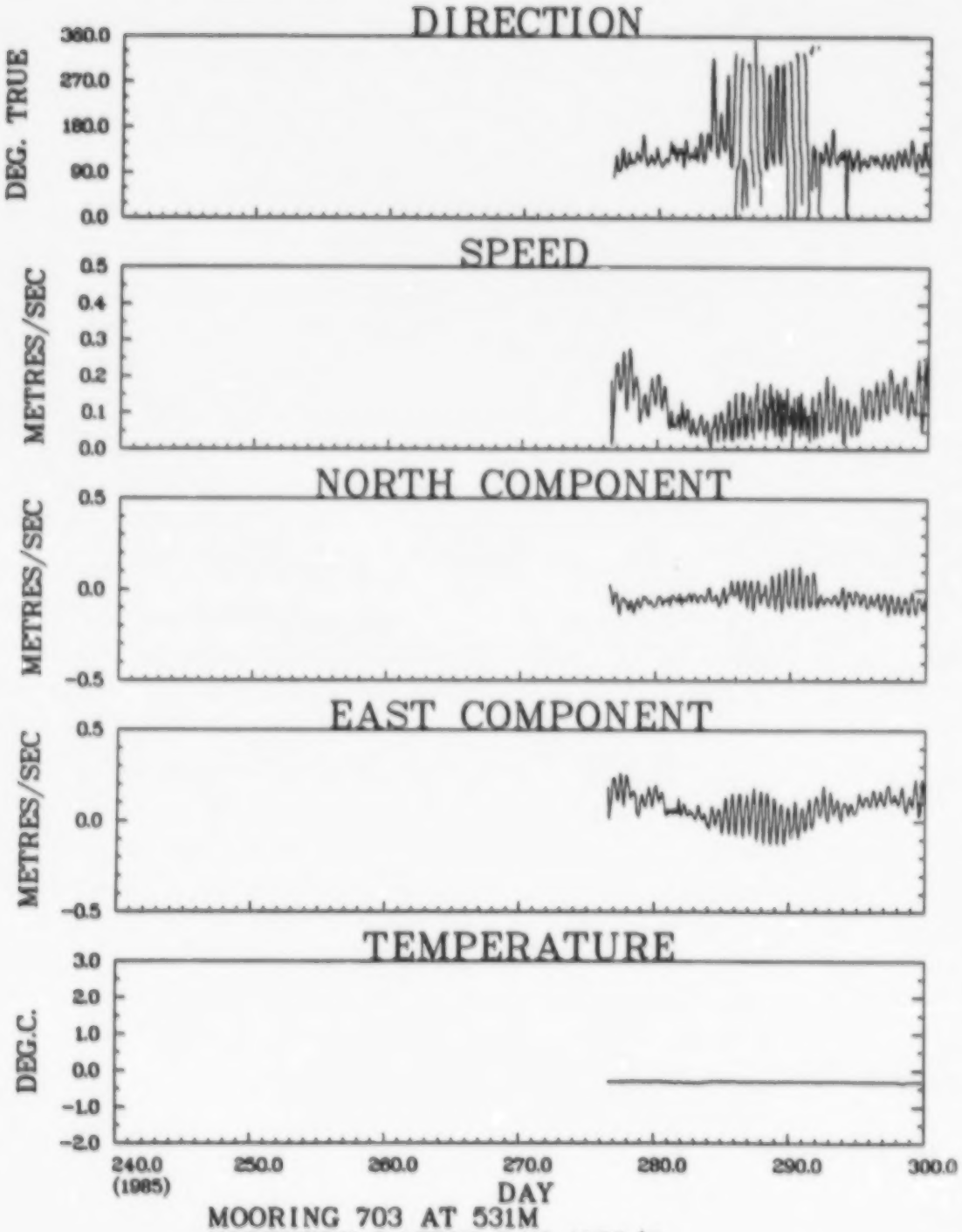
| | | | |
|---|---|---|---|
| Latitude | 76° 29.2N | Deployment | 1220Z 3 Oct., 1985 |
| Longitude | 73° 37.2W | Recovery | 0005Z 22 Aug., 1986 |
| Water Depth | 546 m | Duration | 322 d |

**RECORD LENGTH STATISTICS**

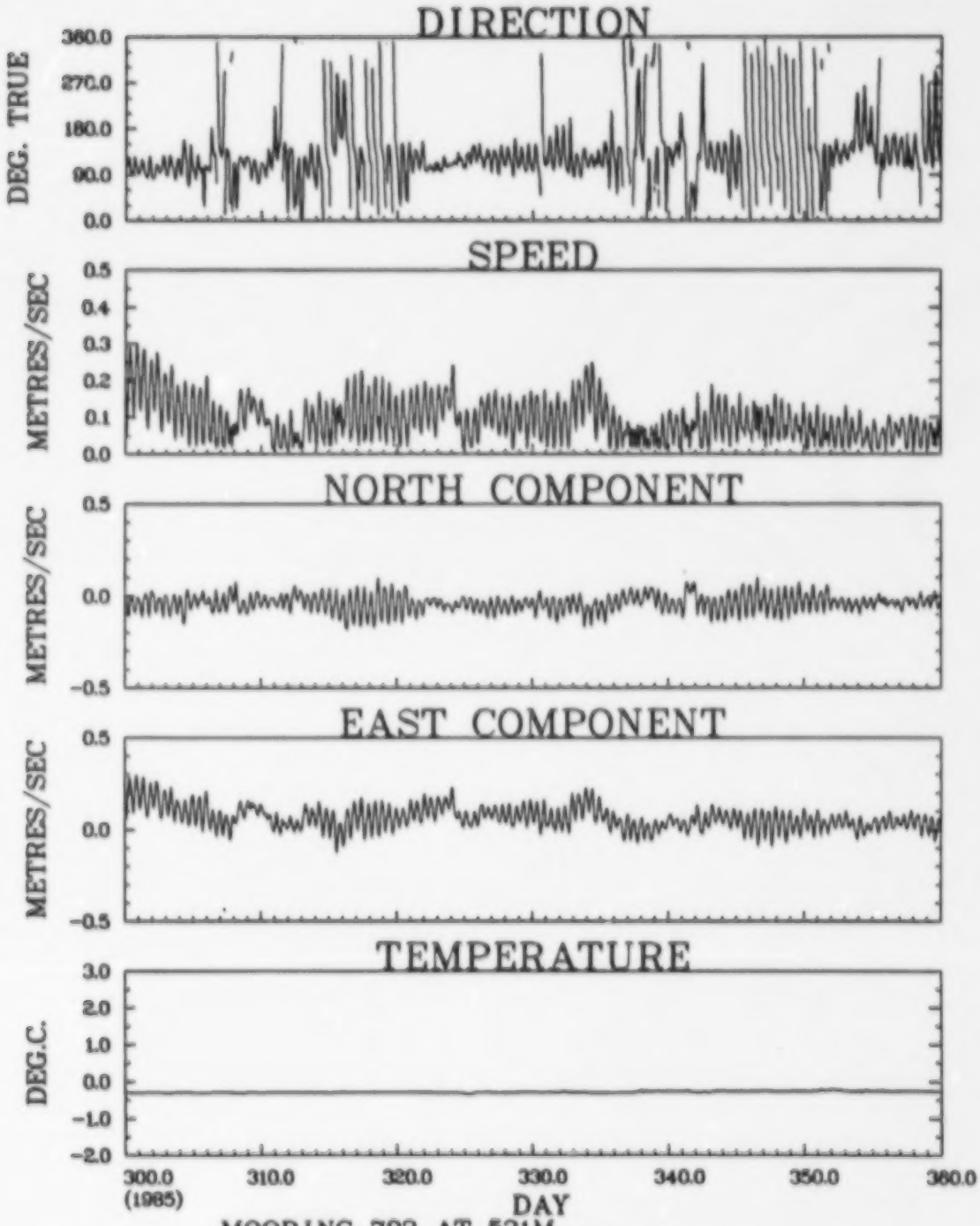
| Sensor | Units | Samples | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|---|---|
| Pressure (P) | dbar | 7738 | 543 | 549 | 545 | 1.1 |
| Temperature (T) | °C | 7738 | -0.39 | 2.87 | -0.18 | 0.14 |
| Salinity (S) | PSS78 | 7735 | 34.13 | 34.50 | 34.37 | 0.07 |
| Speed (R) | $m.s^{-1}$ | 7738 | 0.015 | 0.305 | 0.097 | 0.052 |
| Northeast Component (V) | $m.s^{-1}$ | 7738 | -.120 | 0.193 | 0.019 | 0.041 |
| Southeast Component (U) | $m.s^{-1}$ | 7738 | -.171 | 0.273 | 0.069 | 0.072 |

**MONTHLY MEANS**

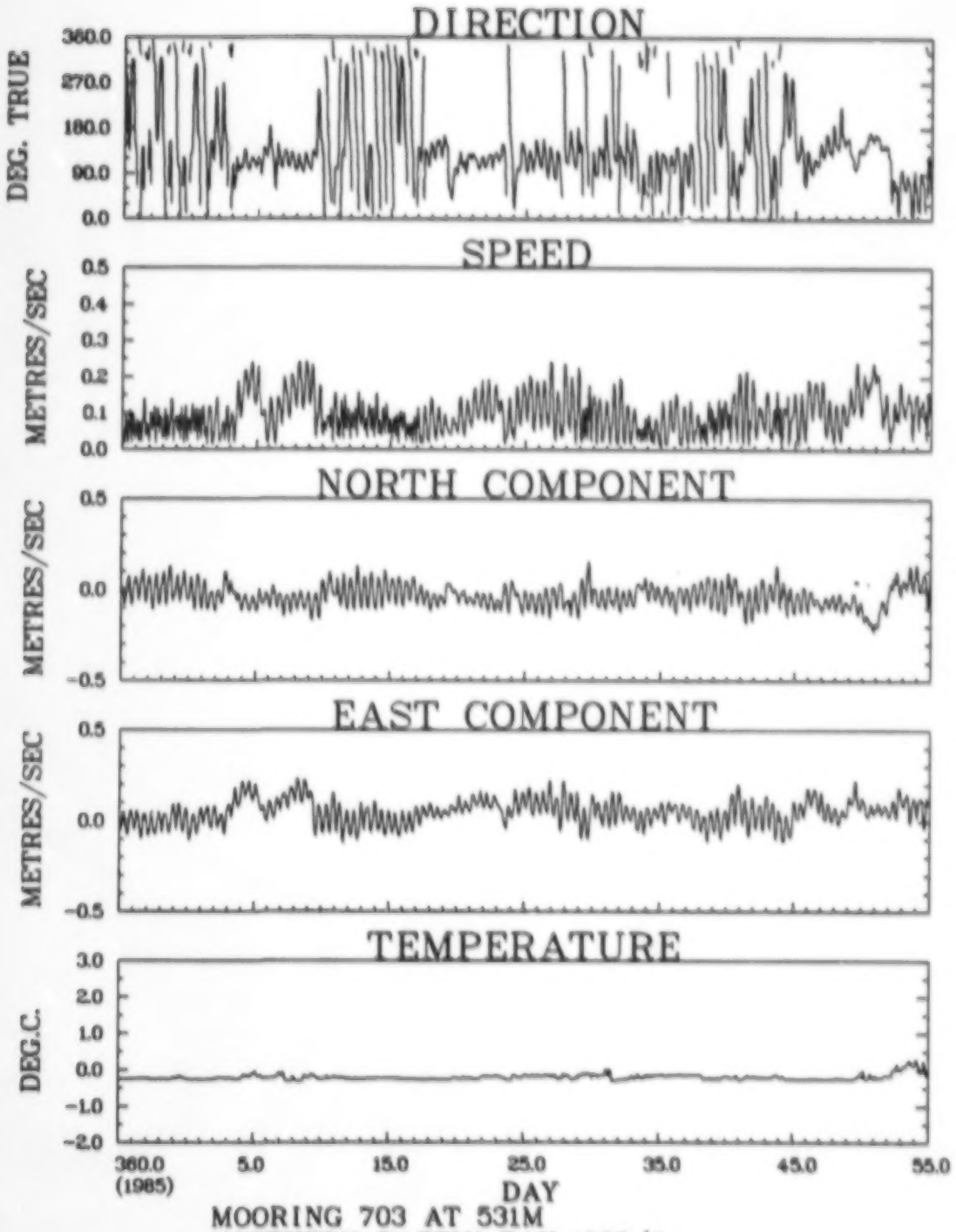
| | Samples | T | S | R | V | U |
|---|---|---|---|---|---|---|
| October | 682 | -0.31±0.01 | 34.43±0.02 | 0.122±.060 | 0.032±.048 | 0.094±.079 |
| November | 720 | -0.31±0.01 | 34.41±0.03 | 0.103±.054 | 0.024±.041 | 0.084±.065 |
| December | 744 | -0.26±0.03 | 34.41±0.02 | 0.070±.036 | 0.003±.031 | 0.036±.064 |
| January | 744 | -0.22±0.05 | 34.41±0.03 | 0.102±.053 | 0.018±.040 | 0.070±.080 |
| February | 672 | -0.15±0.11 | 34.40±0.03 | 0.101±.053 | 0.009±.053 | 0.064±.079 |
| March | 744 | -0.02±0.08 | 34.39±0.03 | 0.103±.051 | 0.022±.041 | 0.070±.078 |
| April | 720 | -0.08±0.08 | 34.36±0.03 | 0.096±.049 | 0.019±.038 | 0.074±.066 |
| May | 744 | -0.04±0.08 | 34.38±0.03 | 0.083±.042 | 0.015±.030 | 0.051±.070 |
| June | 720 | -0.06±0.15 | 34.36±0.04 | 0.109±.058 | 0.022±.043 | 0.089±.070 |
| July | 744 | -0.28±0.12 | 34.24±0.03 | 0.086±.042 | 0.024±.034 | 0.065±.056 |
| August | 504 | -0.36±0.04 | 34.21±0.03 | 0.088±.041 | 0.019±.034 | 0.065±.060 |



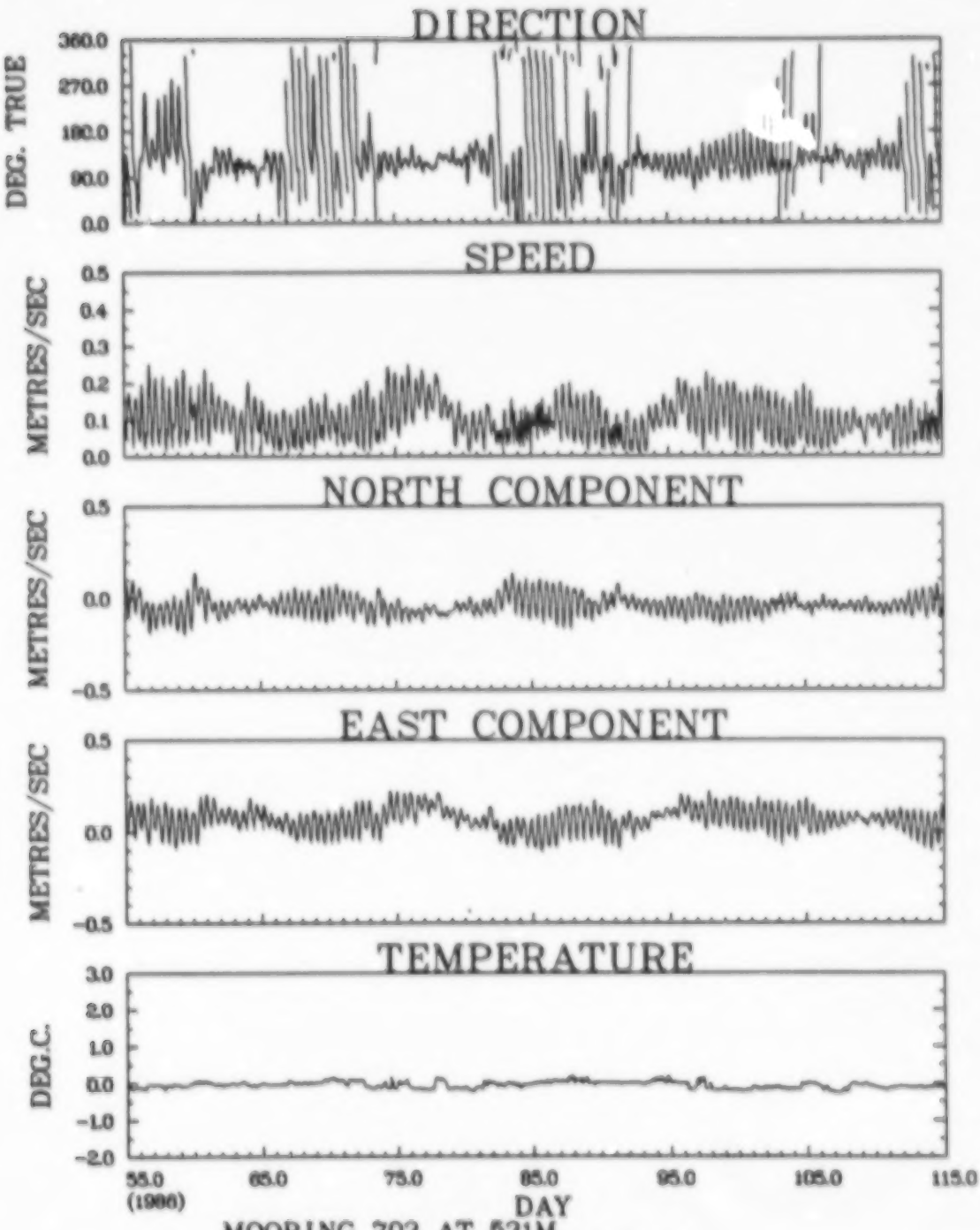

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



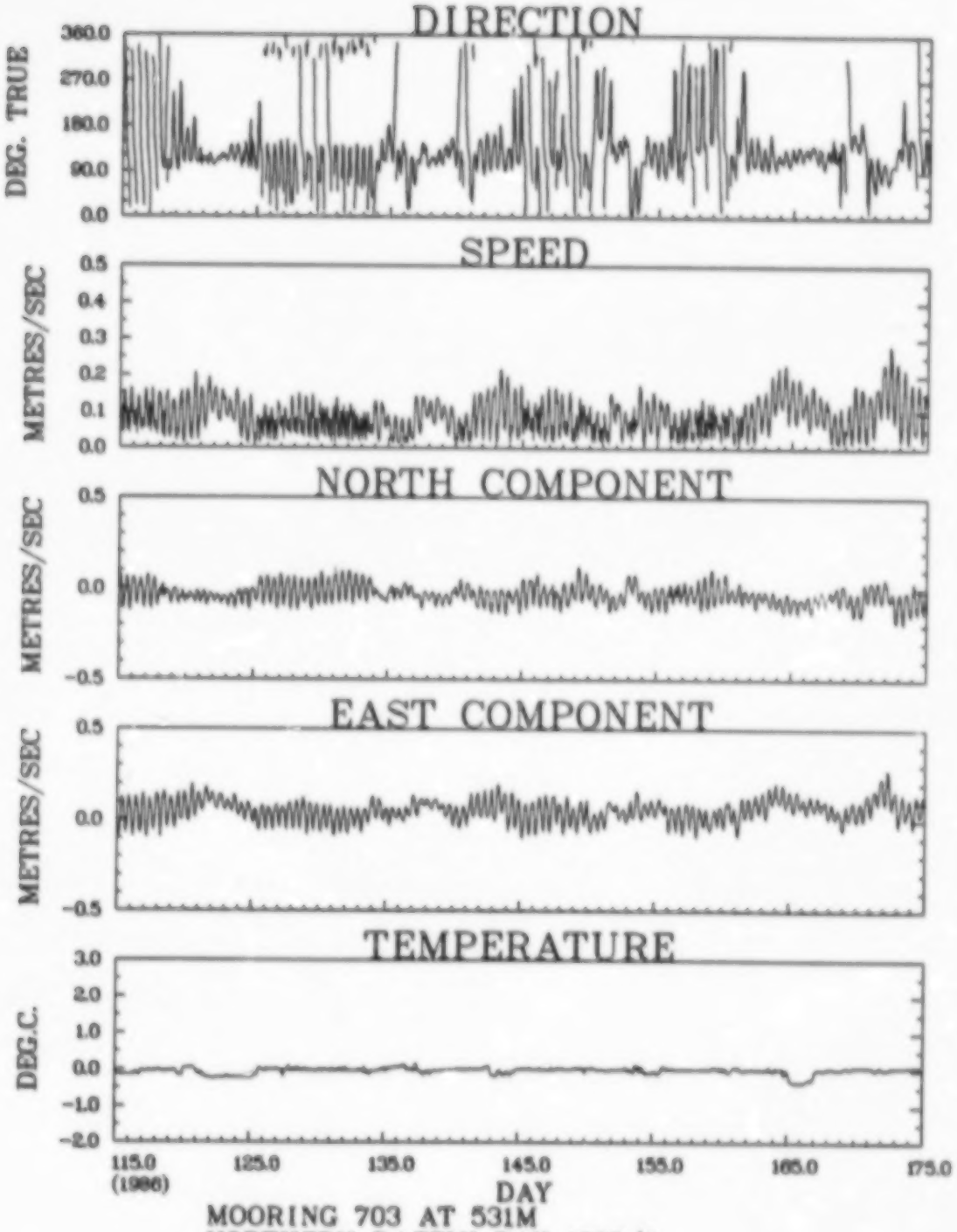

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



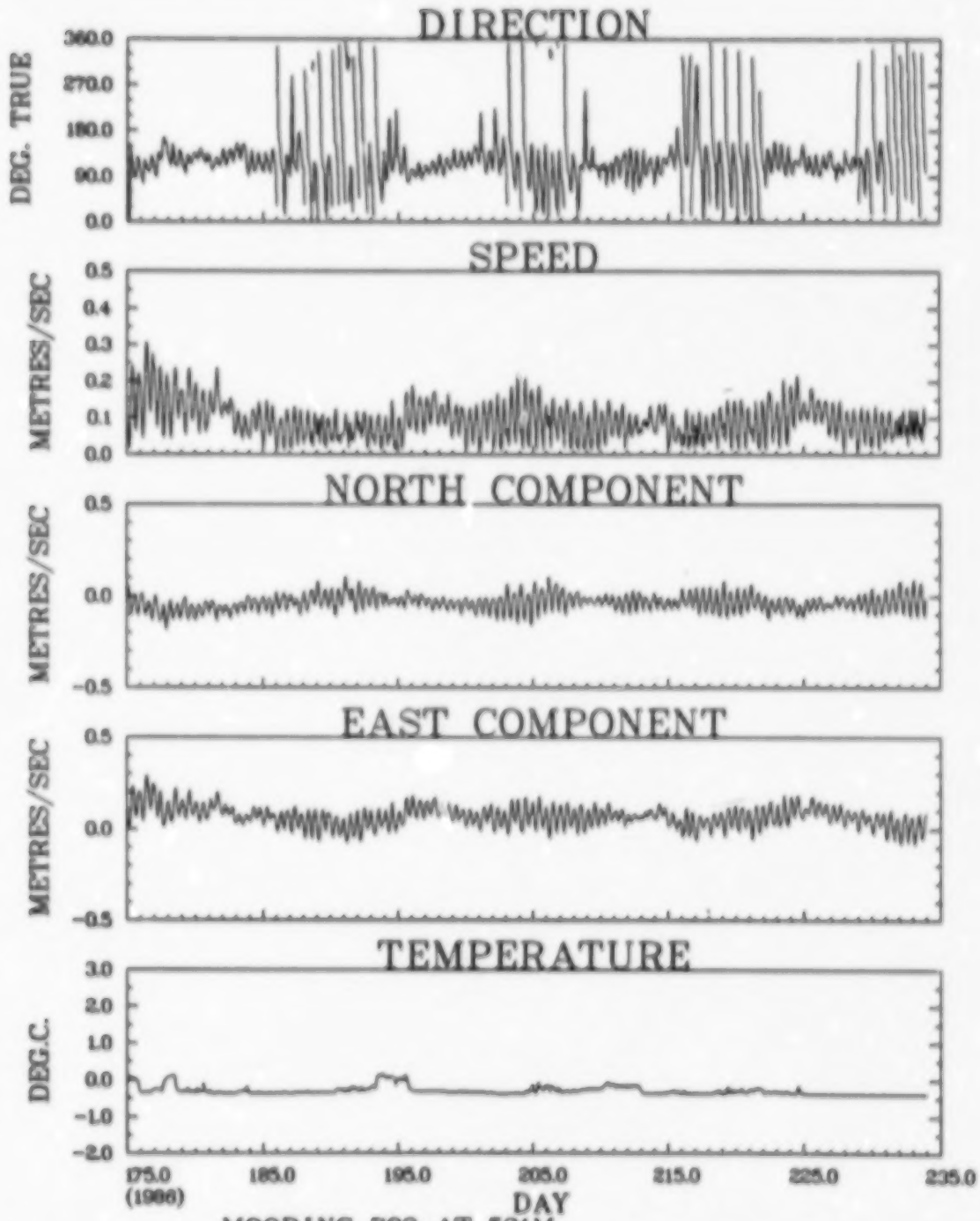

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



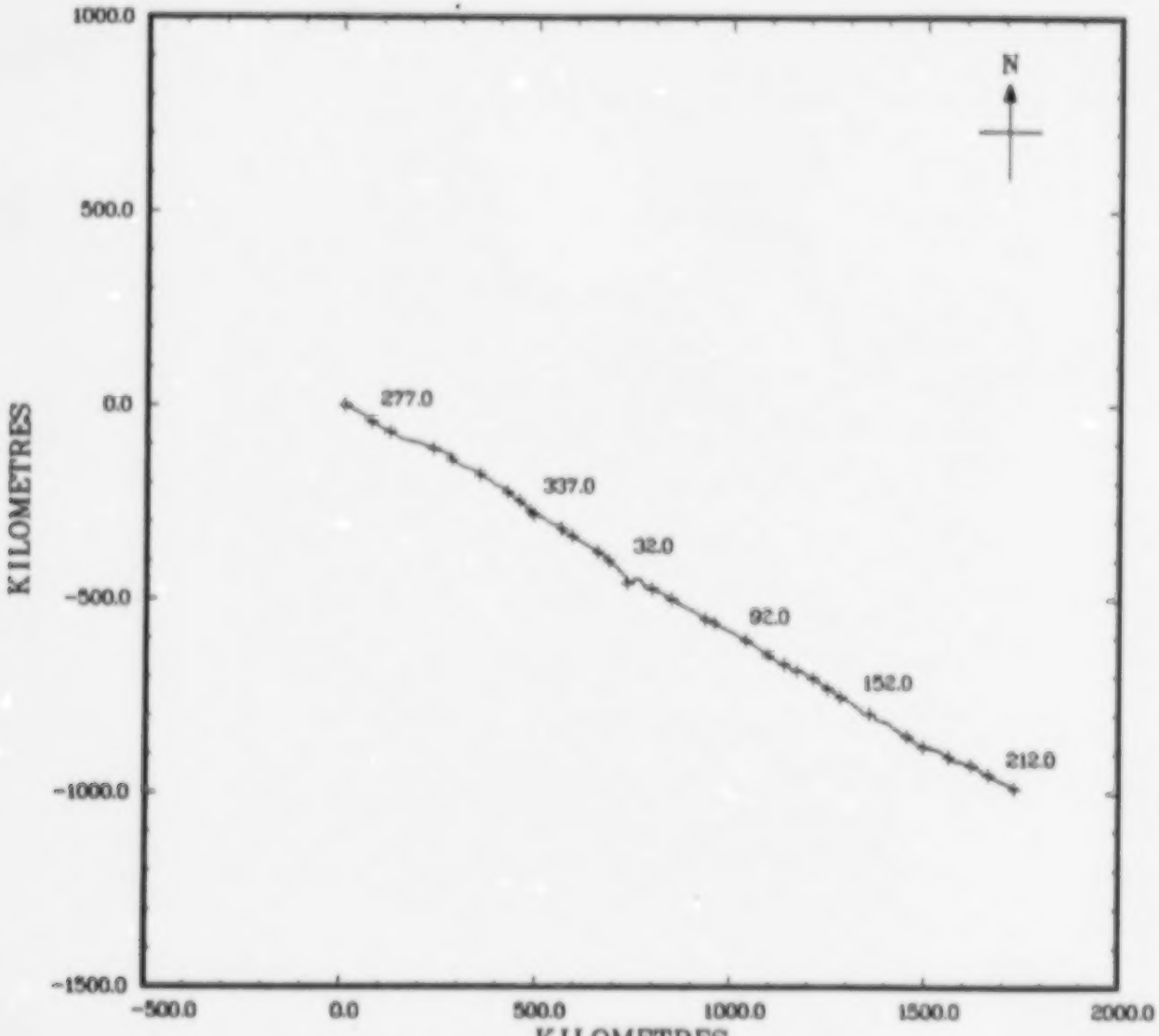

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



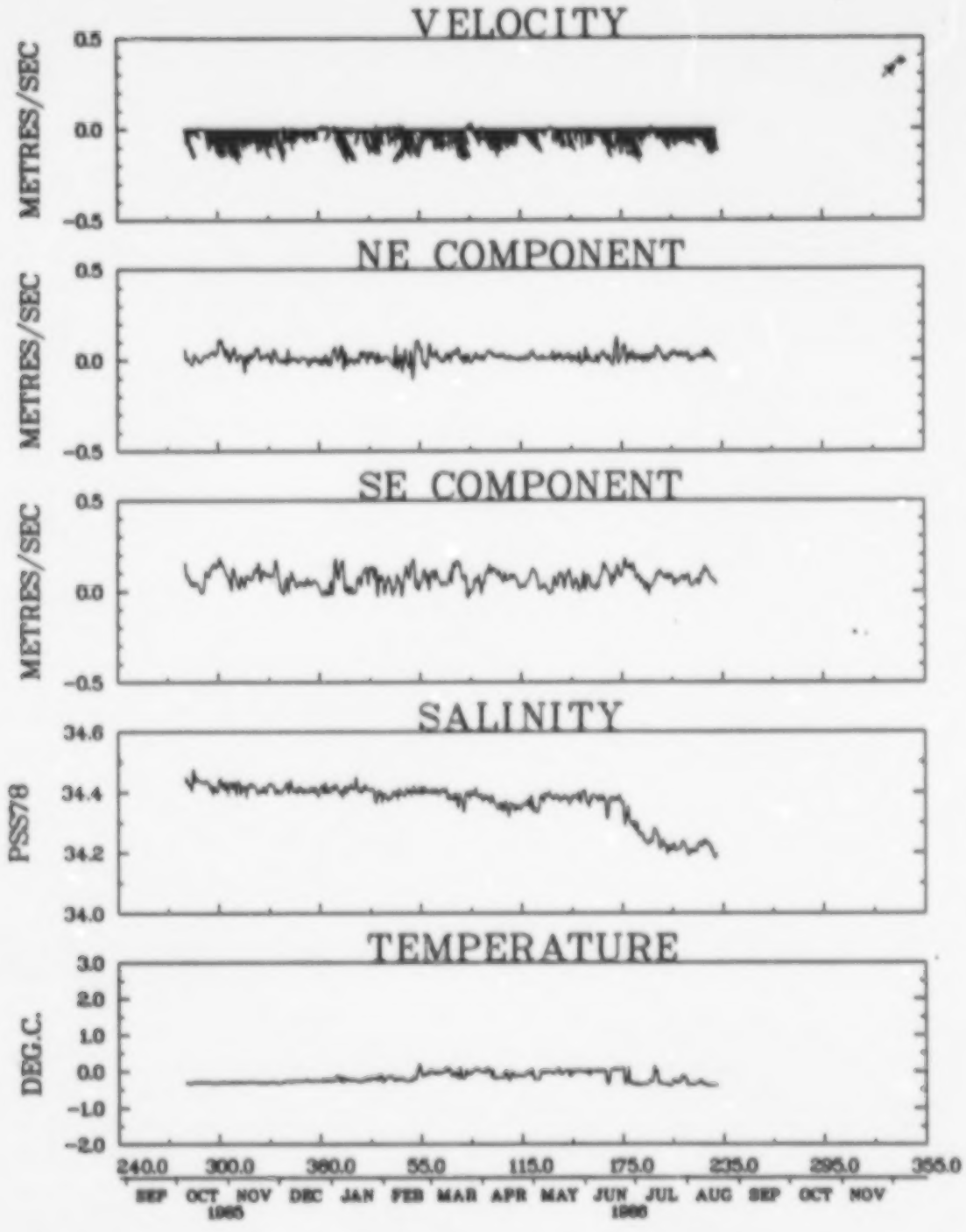

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



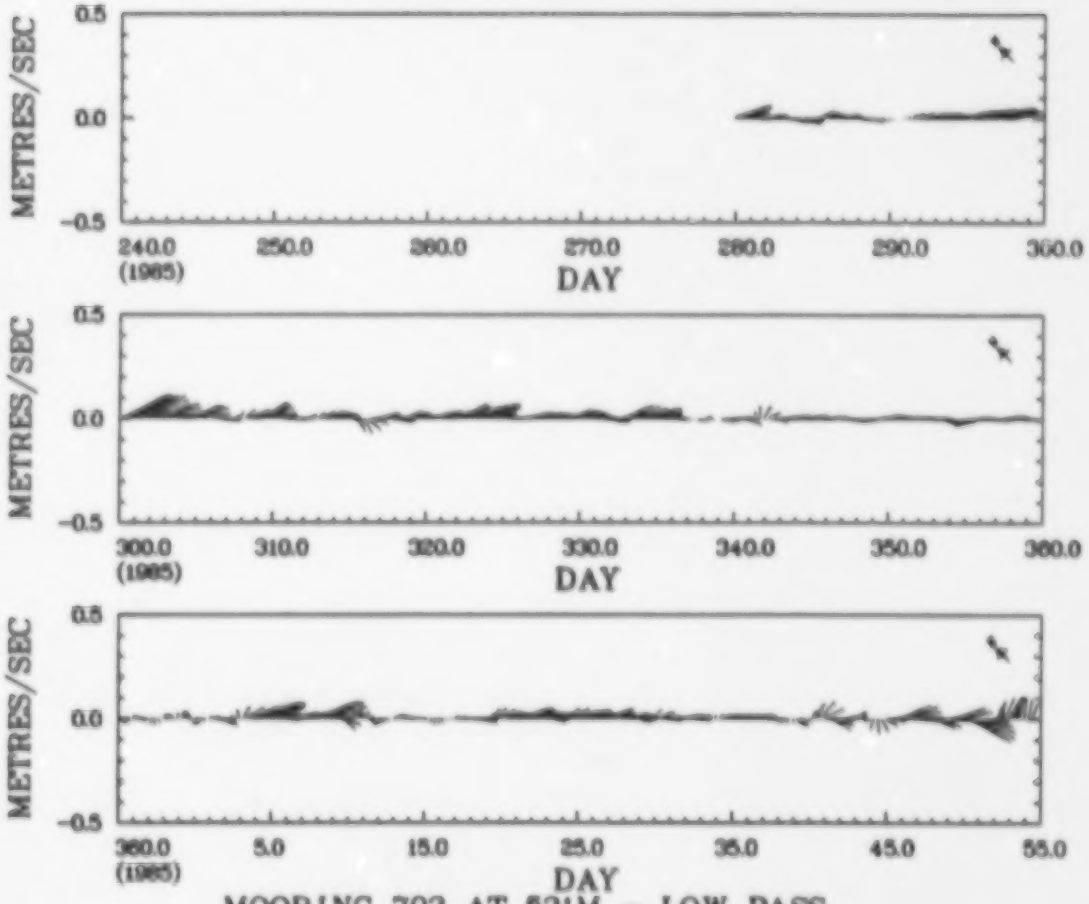

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6



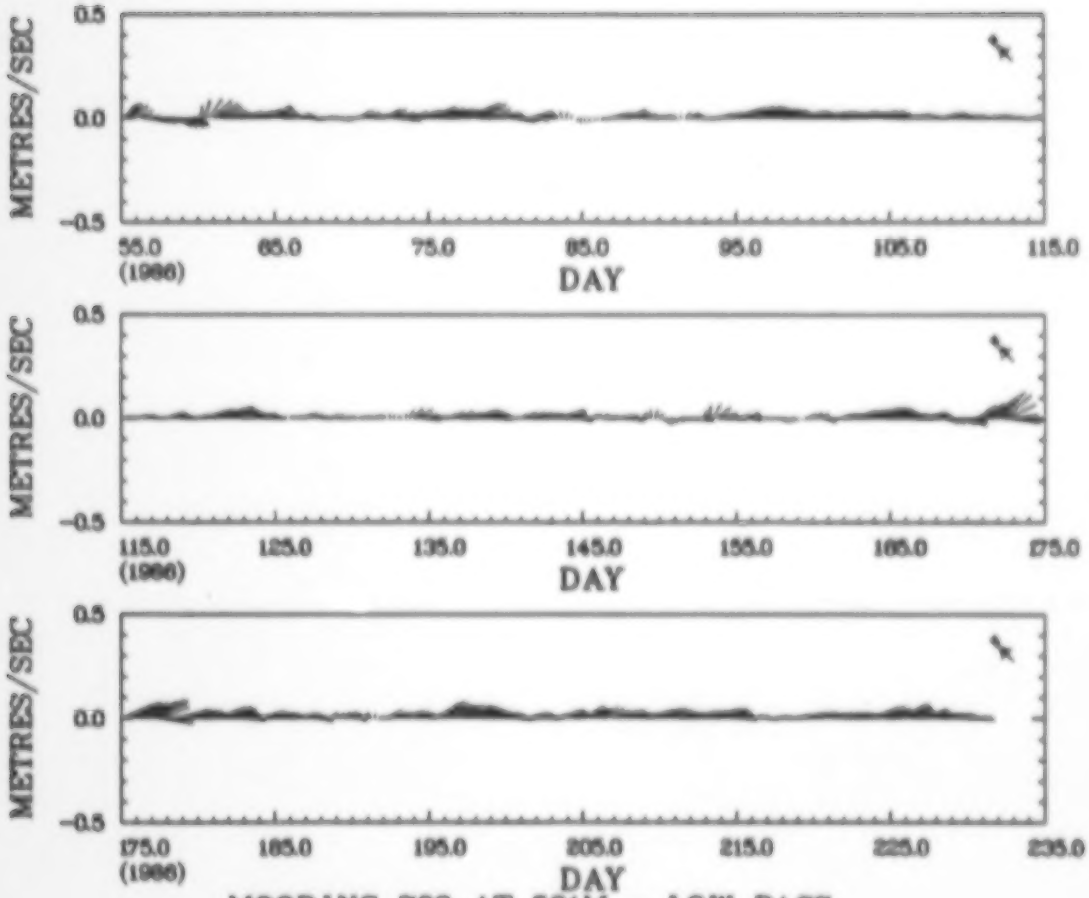

MOORING 703 AT 531M
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 531M - LOW PASS
NORTHERN BAFFIN BAY 1985/6




MOORING 703 AT 531M - LOW PASS
NORTHERN BAFFIN BAY 1985/6



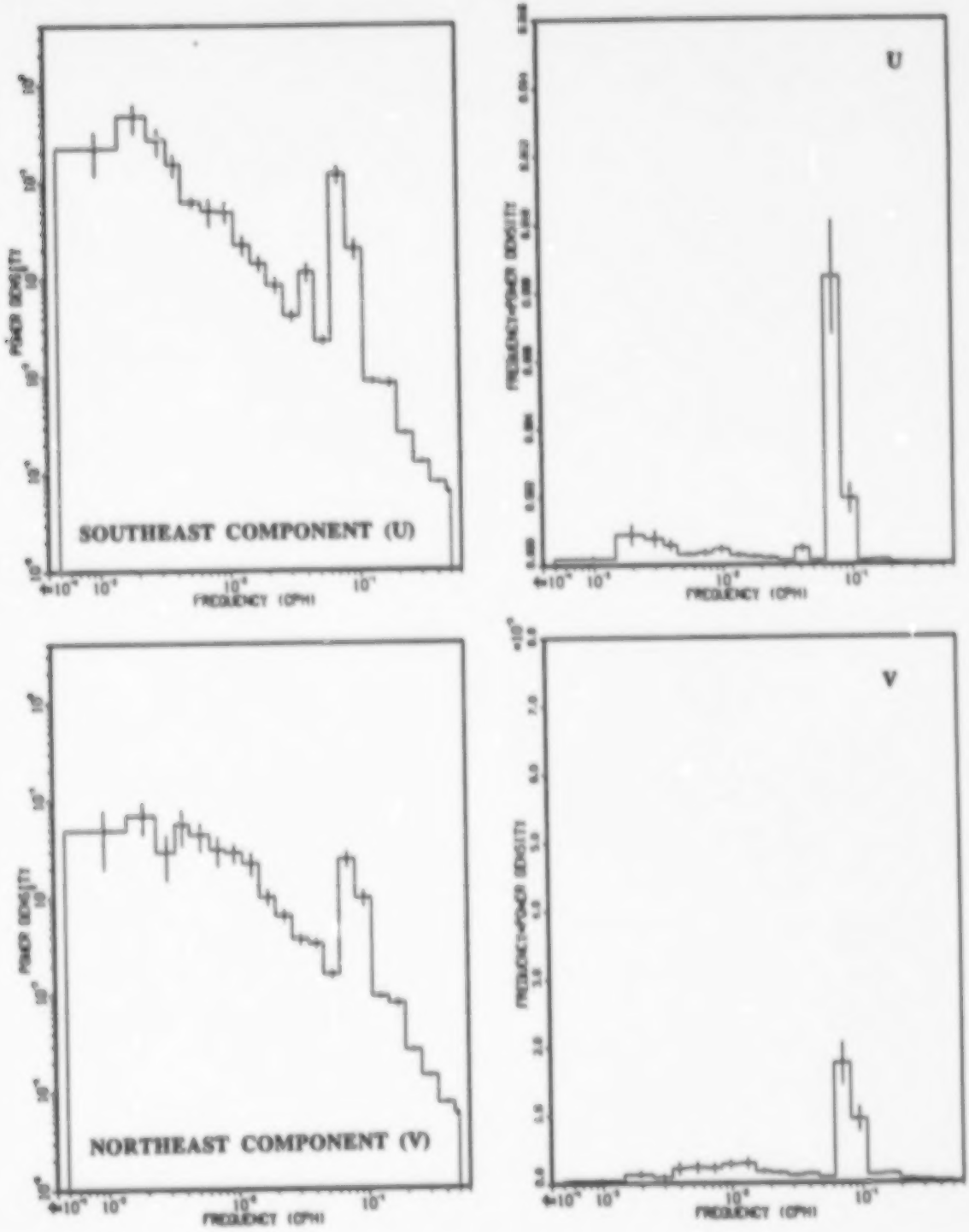

MOORING 703 AT 531M - LOW PASS
NORTHERN BAFFIN BAY 1985/6

**Mooring 703**
**Depth 531 m**

**Tidal Analysis**

322.4 d centred at day 072,1986

| Const | Current Ellipse Major (m/s) | Minor (m/s) | Orien. (°T) | Phase (deg) | Sense | Northeast Comp Amp. (m/s) | Northeast Comp Phase (deg) | Southeast Comp Amp. (m/s) | Southeast Comp Phase (deg) |
|---|---|---|---|---|---|---|---|---|---|
| K1 | .012 | .001 | 120 | 41 | A | .006 | 215 | .010 | 43 |
| O1 | .004 | .001 | 109 | 349 | C | .001 | 197 | .004 | 345 |
| P1 | .004 | .000 | 120 | 22 | A | .002 | 196 | .003 | 24 |
| M2 | .070 | .028 | 129 | 234 | A | .050 | 28 | .057 | 252 |
| S2 | .028 | .016 | 123 | 282 | A | .021 | 60 | .025 | 303 |
| N2 | .014 | .007 | 135 | 203 | A | .011 | 357 | .011 | 229 |
| K2 | .007 | .006 | 79 | 320 | A | .006 | 36 | .007 | 311 |
| MF | .006 | .001 | 121 | 121 | A | .003 | 292 | .005 | 124 |
| M4 | .006 | .001 | 359 | 207 | C | .006 | 207 | .001 | 303 |
| MS4 | .003 | .001 | 351 | 234 | C | .003 | 235 | .001 | 1 |




MOORING 703 AT 531M - LOW PASS
NORTHERN BAFFIN BAY 1985/6